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A Seat at the Table: The Federal Reserve Banks and the Politics of Governance

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A Seat at the Table: The Federal Reserve Banks and the Politics of Governance

By

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Abstract

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This dissertation investigates the Federal Reserve Banks and their governance by boards of directors. It brings to bear original data to address a longstanding blind spot in the political science literature on the Fed. The first empirical chapter examines the political ideologies of Reserve Bank directors since 1975 and shows that directors are more conservative than the average campaign donor in the United States. The second empirical chapter analyzes one of the selection processes that generates this observed ideological distribution, the election of directors by private banks. The analysis first describes the contours of the electoral landscape, and then evaluates predictors of election outcomes. The final empirical chapter presents the results of an original survey of sitting and former directors, which provides first-hand accounts of what directors do, how Reserve Bank policymakers are selected, and how directors perceive their own policy influence. Taken together, the chapters shed light on the the Reserve Bank boards of directors and highlight the critical but little-known role they play in shaping monetary and regulatory policy. In doing so, this dissertation provides the first systematic inquiry into the Reserve Banks and the individuals who oversee them, laying the groundwork for a new research agenda that devotes greater attention to the “private” tier of the Federal Reserve System.

For Mom

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Chapter 1

Introduction

> "To the governor of this bank:
>
> Never forget that it was created to serve the employer and the working man, the producer and the consumer, the importer and the exporter, the creditor and the debtor; all in the interest of the country as a whole."
>
> — Benjamin Strong Jr., first president of the Federal Reserve Bank of New York, in a letter to himself.[1]

The Federal Reserve is the most powerful economic policymaker in the United States. But despite decades of intense scholarly interest in the institution, very little work has examined a key component of its structure: the twelve Reserve Banks. As the regional operating arms of the Fed, the Reserve Banks share responsibility with the Board of Governors to make monetary policy in the Federal Open Market Committee (FOMC) and enforce regulatory policy on the ground. Unlike the Board of Governors, however, which is composed of seven political appointees, the Reserve Bank were designed by Congress to be owned by and response to banking interests. Indeed, the influence of private banks is in many ways built into the Reserve Banks' institutional structure, most notably through their oversight by boards of directors. Composed of nine private citizens—six elected by local banks, and three appointed the Board of Governors—the Reserve Bank boards oversee Reserve Bank operations, make recommendations on interest rate policy, and appoint the Reserve Bank presidents who vote in the FOMC. This unusual system of governance has long underpinned distrust of the Fed both in Congress and among the public. By some accounts, it is unconstitutional.[2]

1 Quoted from Chandler (1958). Until 1935, Reserve Bank presidents were called governors. Strong reportedly kept this letter in his desk drawer at the New York Fed, where he served from 1914 until his death in 1928.

2 The appointment of Reserve Bank presidents by the boards of directors has a long history of litigation in the courts. In the late 1970s, for example, Representative Henry Reuss (D-WI) brought a suit alleging he was personally injured by the unconstitutional appointment of the Reserve Bank presidents and their participation in the FOMC (*Reuss v. Balles et al.* 1978). Reuss, after failing to pass legislation that would make the Reserve Bank presidents political appointees, claimed the depreciation of a bond

This dissertation begins from the basic premise that the Reserve Banks and the individuals who govern them matter. It aims to address a substantive blind spot in the political science literature on the Fed, which has focused almost exclusively—perhaps quite naturally—on where politics is most evident: the Board of Governors and FOMC. A consequence is that while we have accumulated a deep understanding of those institutional structures and the policymakers within them, we know next to nothing about the selection of Reserve Bank presidents, the internal politics of the Reserve Banks, and the private citizens and special interests that oversee them. The dissertation consists of three empirical chapters that aim to bring the Reserve Banks and their governance into the fold of the study of the Fed and the politics of economic policymaking.

Beyond shedding light on the poorly understood "private" tier of the Fed, the dissertation highlights a unique and powerful avenue through which organized interests may influence the policymaking process. As is well documented in the study of American politics, organized interests have at their disposal a wide variety of strategies to amplify their voices in government. Groups can lobby legislators (Hall and Wayman 1990; Hall and Deardorff 2006) and bureaucrats (Boehmke, Gailmard, and Patty 2013; Drutman and Hopkins 2013); donate to political campaigns (Kalla and Broockman 2016; Fouirnaies and Hall 2018); submit comments during the administrative rulemaking process (Kerwin 2003; Yackee and Yackee 2006); and litigate policy in the courts (Kagan 1991; Coglianese 1996). They can also engage in more subterranean efforts, like circulating draft legislation (Hertel-Fernandez 2014); mobilizing the political participation of employees (Hertel-Fernandez 2018); and "cultural capture" (Kwak 2013). I show that banks have another option: they can govern. By having a formal seat at the table in the governance of the Reserve Banks and the selection of key policymakers, financial interests can ensure their preferences are represented throughout the Federal Reserve System.

The remainder of this chapter motivates the study of Reserve Bank governance and reviews literature on the Federal Reserve and economic policymaking. It then puts forth an argument highlighting the implications of the Reserve Banks' system of governance for interest group participation in Fed policymaking. The chapter then outlines the general methodological approach pursued in the dissertation and summarizes the analyses presented in subsequent chapters.

1.1 Why Study the Reserve Banks?

While much of the existing literature on the Fed overlooks the Reserve Banks, this dissertation makes the case they are worthy—and, indeed, critical—objects of inquiry. In this section, I motivate the study of "one of the most important, least studied, and least defensible" (Conti-Brown 2016) aspects of the Federal Reserve System and discuss several

he owned was due to presidents' illegal voting on monetary policy. Similarly, in the 1980s, Senators Donald Riegle (D-MI) and John Melcher (D-MT) each sought injunctions against presidents' participation in the FOMC, arguing that it was in violation of the Constitution's Appointments Clause (*Riegle v. FOMC, et al.* 1981; *Melcher v. FOMC, et al.* 1987). Legal scholars continue to debate the Reserve Banks' constitutionality (see, for example, Conti-Brown 2016).

reasons why the Reserve Banks and their governance should attract more attention from scholars going forward.

1.1.1 Reserve Banks—and Their Directors—Make Policy

One simple potential explanation for the dearth of research on the Reserve Banks is that they don't matter. While the Reserve Banks initially operated with a degree of authority that arguably trumped the Board—each Reserve Bank set their own discount rate, effectively conducting their own monetary policy—the Banking Act of 1935, coupled with growing nationalization of economic policy, stripped the Banks of their policymaking independence and demoted them to a subordinate role.[3] As a result, the Board subsumed all of the Fed's policymaking authority, while the Reserve Banks transformed into academic research centers with little influence on policy outcomes. This narrative is popular among many scholars of the Fed, perhaps leading to their dismissal as "harmless anachronisms" (Melton 1985) or "collateral partners" (Binder and Spindel 2013).[4] As Melton (1985) writes: "For policy formation, the FOMC is usually all that matters; the [B]anks (except for the fruits of their research) do not."[5]

While it is true that the Reserve Banks are less powerful today than they were before 1935, they undeniably continue to play an instrumental role in monetary and regulatory policymaking. Most notably, the Reserve Bank presidents vote on monetary policy in the FOMC, making them among the most consequential policymakers in the United States. Though the presidents compose a minority on the committee—five of the twelve presidents may vote at each FOMC meeting, compared to all seven governors—all twelve presidents participate in the deliberations.[6] As discussed in greater detail below, five voting presidents may be sufficient to move monetary policy in a more conservative direction. The Reserve Banks' minority representation on the FOMC also betrays their more dominant position in recent years. Presidents compose a 5-3 majority on the FOMC as of July 2018 and have held a majority with some regularity since at least 2014. This tracks with a steady decline in the governors' majority advantage since the late 1980s (Conti-Brown 2016). Prior to George H.W. Bush's term, governors held a majority close to 100% of the time; by the end of the Obama administration, they composed a majority roughly

3 The discount rate is the interest rate at which banks may borrow money from their local Reserve Bank's "discount window" in order to meet reserve requirements.

4 This early account seems to capture the reasoning behind contemporary scholars' willingness to exclude the Reserve Banks from study: "It is no deprecation of the abilities and prestige of the other eleven bank presidents to say that they rank well down the list of System power centers. The presidents are in general gifted and articulate men, and their views will always be weighed by the board and its chairman. Nevertheless, the last remaining power of the banks vanished when the original tool of monetary management–changes in the discount rate–lost its money-market effectiveness" (Hastings and Robertson 1962).

5 See, however, Shull (2005) and Conti-Brown (2016) for pushback against this narrative.

6 Reserve Bank presidents are also, quite simply, public figures. Presidents' public statements may shape popular opinion on monetary policy, and they may also move markets (Aizenman, Binici, and Hutchison 2016). By virtue of their position, the presidents who lead the Reserve Banks play an influential and unique role in the political economy that few other executives in or out of government enjoy.

40%of the time. Delays in filling governor vacancies have shifted the normal balance of power on the committee in the Reserve Banks' favor.

Beyond monetary policy, Reserve Banks are responsible for implementing financial regulations and supervising financial institutions, thereby ensuring the efficacy of the federal government's regulatory regime. While the Board of Governors is responsible for bank regulation and supervision, the Reserve Banks have been delegated the authority to conduct on-the-ground oversight of financial institutions within their districts. The 2010 Dodd-Frank Act further expanded the Fed's regulatory portfolio to require more intensive and comprehensive oversight of banks, non-bank financial institutions, and the overall stability of the financial system, making supervision an increasingly important component of the Reserve Banks' workloads. Some of the recent controversies relating to the Fed stem from concerns that the Reserve Banks have failed to meet their supervisory responsibilities—or, even worse, that they have been "captured" by the banks they supervise. The "secret Goldman Sachs" tapes released in 2014, for instance, depicted New York Fed bank examiners deferring to Goldman Sachs on regulatory protocol, with senior Fed regulators urging their more junior colleagues to back off.[7] In another example, the appointment of John Williams as president of the New York Fed in April 2018 was met with opposition in part because the Wells Fargo consumer abuse scandal—in which millions of bank and credit card accounts were fraudulently opened in consumers' names—happened under his watch as president of the San Francisco Fed.[8] The Reserve Banks' supervisory responsibilities have consequences for the efficacy of financial regulation and the safety and soundness of the financial system.

Given their proximity to local banks and businesses, Reserve Banks also support the Fed's monetary and regulatory policy activities by compiling and communicating information about local economic conditions. This on-the-ground intelligence is formally synthesized in macroeconomic forecasts and anecdotal accounts prepared by Reserve Bank staff for use in FOMC deliberations, as well communicated in meetings with the Board of Governors regarding bank supervision. By channeling information to the Board, the Reserve Banks play a role in shaping the Board of Governors' perception of the economy.

The boards of directors that oversee the Reserve Banks help facilitate Reserve Bank policymaking. Directors are private citizens, but they appoint the presidents that vote on monetary policy in the FOMC—their most direct, and arguably most potent, form of influence on Fed policymaking. They also oversee compensation for top officials, including supervisory staff, and are key source of the local economic intelligence that is funneled into the FOMC, not only regarding economic conditions but also the business and banking communities' reactions to Fed policy (Miller 1961). In addition, directors continue to weigh in on monetary policy by submitting recommendations on the discount rate to the Board of Governors every two weeks.

7 See Jake Bernstein, "Inside the New York Fed: Secret Recordings and Culture Clash," Pro Publica, September 26, 2014, https://www.propublica.org/article/carmen-segarras-secret-recordings-from-inside-new-york-fed. Goldman Sachs only recently came under the Fed's regulatory purview, after it elected to convert to a bank holding company in 2008.

8 See, for example, Kenneth H. Thomas, "N.Y. Fed doesn't need a regulator who whiffed on Wells," *American Banker*, March 28, 2018, https://www.americanbanker.com/opinion/ny-fed-doesnt-need-a-regulator-who-whiffed-on-wells.

As with the Reserve Banks themselves, however, the boards of directors have been dismissed as largely ornamental bodies. As a congressional report put it: "the power of the directors to direct is limited" (U.S. Congress 1952).[9] In particular, scholars have pointed to directors' discount rate recommendations as emblematic of their triviality. The Board of Governors has final authority over the discount rate—which has lessened in importance as a tool of monetary policy in any case—and there is evidence that governors and Reserve Bank presidents dictate the rate recommendation to the boards (Reagan 1961; Jinushi and Kuttner 2008). Laurence Meyer, a former Fed governor, noted that he interpreted boards' discount rate recommendations as signals of the Reserve Bank presidents' policy preferences (Meyer 2004). Of course, directors choose these presidents. Tootell (2000), moreover, finds that "the discount rate recommendation is not simply the district president telegraphing his or her punch," and there are examples of boards overruling their presidents' recommendations.[10]

Beyond the discount rate, anecdotal accounts provide other evidence of director influence. For one, directors appear to exercise their president appointment authority independently, despite the Board of Governors having veto power over their decisions. Former Fed governor Kevin Warsh notes "it would be very difficult, and it would be reasonably unprecedented in modern times, for the Reserve Bank's preferred choice not to ultimately be accepted by the Board of Governors" (Bordo 2016).[11] Moreover, Reserve Bank presidents themselves appear to think they matter. When taking over the New York Fed in 2003, Timothy Geithner recruited big bankers—including JPMorgan Chase CEO Jamie Dimon and former Goldman Sachs chairman Stephen Friedman—onto the board of directors precisely because he felt the sitting directors were "weak on financial experience" (Geithner 2014). Even after being warned by former New York Fed president and Fed chairman Paul Volcker that these recruitments would expose the New York Fed to "reputational risk," Geithner apparently felt the need for financial expertise on the board was sufficiently critical to override these concerns.[12]

9 Hastings and Robertson (1962) express a similar view: "It is probably not unfair to say that the boards of directors of the twelve banks have had their power reduced to that of nominating committees....their positions are largely honorific; and though the [B]oard expresses public gratitude for the "economic intelligence" furnished by bank and branch directors, the plain fact is that their monthly meetings are simply genteel bull sessions."

10 See, for instance, Chicago Fed president Charles Evans' account during the August 2008 FOMC meeting.https://www.federalreserve.gov/monetarypolicy/files/FOMC20080805meeting.pdf, pg. 106.

11 Accounts of the Board of Governors exercising its veto power over Reserve Bank appointments are scarce. Between 1977 and 2016, no president candidate proposed by directors was rejected by the Board; moreover, of the 32 presidents approved in that period, only four garnered any "no" votes among governors (Boesler and Smialek 2017). Of course, it is possible that the threat of a veto is sufficient for keeping directors' appointments in line. Arthur Burns, for instance, chairman of the Fed through the 1970s, reportedly tried to influence the selection of Reserve Bank presidents by threatening to veto (Thoma 2017).

12 For reasons that will be made clear later in this section, however, Geithner came to regret this decision.

1.1.2 Reserve Bank Governance Has Implications for FOMC Politics

Beyond addressing a general gap in the existing literature, Reserve Bank governance bears on a well-established empirical finding regarding presidents' voting behavior in the FOMC. As a large body of research shows, presidents tend to prefer more contractionary monetary policy relative to governors (e.g. Woolley 1984; Chappell, Havrilesky, and McGregor 1993; Meade and Sheets 2005).[13] That presidents behave as conservative counterweights in the FOMC is consistent with a founding justification for the decentralization of monetary policymaking. By giving privately owned Reserve Banks some authority to make policy, they would be bulwarks against the easy-money proclivities of big government (Meltzer 2010).[14] Despite the centrality of this finding to the empirical literature on the Fed, however, we do not have a clear sense of the foundations of this conservative bias, or the mechanisms through which the bias may operate.

Focusing on Reserve Bank governance draws attention to the private citizens who appoint the presidents, and highlights the consequences of this system of governance on FOMC politics. Reserve Bank presidents not only express more inflation-averse preferences than governors, but they are also more likely to vote as a unified bloc and to dissent from policy decisions in favor of tighter policy. A consequence of presidents' bloc voting is that governors must exhibit unity in the FOMC in order to maintain their dominance over the direction of monetary policy. In particular, they must be united in their dovishness in order to push the FOMC's ideal point beyond the most conservative median voter (Morris 2002). Given that FOMC chairs mold policy consensus by weighting the views of all FOMC members, the overall effect of having reliably conservative presidents is to make monetary policy less expansionary than it otherwise would be (Havrilesky and Gildea 1995; Havrilesky 1995). Chappell, Havrilesky, and McGregor (1995) estimate that replacing a president on the FOMC with a governor would raise the steady-state inflation rate by nearly 1 percentage point.

In addition to offering insight into the dynamics underlying these empirical regularities, studying Reserve Bank governance also complements a rich body of work that examines the appointment of the Board of Governors by elected officials (see for example: Beck 1984; Morris 2002; Chang 2003; Meltzer 2011). Although many scholars have alluded to the relationship between presidents' conservativeness and their selection by Reserve Bank directors (Woolley 1984; Havrilesky 1995; Shull 1995), there has been no

[13] There are numerous demonstrations of this: for example, presidents as a group cast a larger percentage of contractionary policy votes than governors; presidents chosen under any Administration cast votes for more contractionary monetary policy than governors appointed by the same Administration; presidents are more likely to dissent in favor of higher interest rates.

[14] The use of the term "conservative" to describe inflation aversion is standard in the literature and reflects the predominance of the unidimensional model of monetary policy preference. The convention is perhaps best highlighted by the seminal model put forth by Rogoff (1985) in which society is made better off through the appointment of a "conservative central banker"—one that is more inflation averse than the population. Throughout the dissertation, I use the term "conservative" interchangeably with "hawkish" to denote an individual's relative inflation aversion. Hawks prefer "tight," or contractionary, monetary policy via higher interest rates. In contrast, monetary "doves" are less averse to inflation and prefer trading off higher inflation for lower unemployment. Doves prefer "loose," or expansionary, monetary policy via lower interest rates.

effort to investigate the selection of Reserve Bank presidents comparable to that devoted to the appointment of governors. Studying Reserve Bank governance can shed light on the foundations of Reserve Bank presidents' voting behavior in the FOMC and contribute to a large literature that analyzes the monetary ideologies of FOMC participants.

1.1.3 Reserve Bank Governance is Politically Contentious

Calls for Reserve Bank governance reform date back to the Fed's founding, but the drumbeat has grown louder in recent years. Controversy surrounding the Fed's activities leading up to after the 2007-08 financial crisis has attracted a particularly intense level scrutiny of the Reserve Bank boards, both in and out of Congress. In one of the most significant legislative revisions to the Reserve Banks' system of governance since 1935, the 2010 Dodd-Frank Act prohibits bankers serving on the boards from participating in the process of selecting Reserve Bank presidents.[15] Rather than quell criticism around the Reserve Banks, however, momentum behind further reform of the processes by which presidents and directors are selected has only grown since 2010. Existing literature is unable to fully contextualize these developments, however.

In particular, the financial crisis cast a spotlight on potential conflicts of interest on the Reserve Bank boards. At least 18 sitting and former directors at the time of the crisis were affiliated with companies that accessed the Fed's emergency lending programs (GAO 2011). In a well-publicized example, JPMorgan Chase CEO Jamie Dimon and General Electric CEO Jeff Immelt both served as directors of the New York Fed while their companies received Fed loans. Stephen Friedman, the chairman of the New York Fed at the time, was a former chairman of Goldman Sachs, held a large financial stake in the company, and was concurrently serving on the Goldman and New York Fed boards, even as Goldman borrowed billions from the Fed.[16] New York Fed directors were also consulted on the bailout of Bear Stearns and the creation of other emergency lending facilities. A 2011 GAO investigation into Reserve Bank governance—ordered by Congress in the Dodd-Frank Act—concluded, "directors' affiliations with financial firms and former directors' business relationships with Reserve Banks continue to pose reputational risks to the Federal Reserve System" (GAO 2011). Concerns that bankers have undue influence in Fed policymaking, are able to secure preferential regulatory treatment, and financially exploit the privileged information they obtain during their board service have

[15] This provision was only included after a proposal to make the New York Fed president a political appointee was rejected. Making the Reserve Bank presidents public appointees continues to be a popular reform proposal among progressives (see, for example, Haedtler, Levin, and Wilson 2016).

[16] The full scale of the controversy surrounding Friedman stemmed from Goldman's conversion from an investment bank to a bank holding company in September 2008. The move allowed Goldman to access additional emergency financing while also bringing it under the New York Fed's regulatory purview. However, because the Board of Governors prohibits "Class C" directors from owning stock in or serving as directors of bank holding companies, Friedman's Goldman affiliations were now in violation of Fed policy. The New York Fed requested a waiver, arguing that Friedman was providing critical leadership as head of the search committee for Timothy Geithner's replacement as president of the Reserve Bank. It was later revealed that Friedman purchased new shares in Goldman while waiting for waiver approval, and as Goldman continued to borrow funds from the Fed. He resigned from the New York Fed in May 2009 (see Kelly and Hilsenrath 2009).

spurred proposals—including one adopted in the 2016 Democratic Party Platform—to kick bankers of the Reserve Bank boards entirely.[17] As Senator Bernie Sanders (D-VT) opined while running for president, "We would not tolerate the head of Exxon Mobil running the Environmental Protection Agency. We don't allow the Federal Communications Commission to be dominated by Verizon executives. And we should not allow big bank executives to serve on the boards of the main agency in charge of regulating financial institutions" (Sanders 2015).

Grassroots organizations have also put the Reserve Banks in their crosshairs, a somewhat surprising development given the historic absence of interest group mobilization around the Fed. The Center for Popular Democracy's "Fed Up" campaign, led by a coalition of progressive and labor groups, is illustrative. Since protesting the Fed's annual monetary policy conference in Jackson Hole, Wyoming in 2014—the first time in recent memory that activists attended the event—Fed Up leaders meet regularly with Board governors, Reserve Bank presidents, and Reserve Bank directors to demand greater transparency, accountability, and diversity throughout the Federal Reserve System (Dunsmuir 2016). [18] The coalition has been especially effective in pushing Reserve Banks to open the selection processes for presidents and directors to the public.[19] The Atlanta Fed's search for a new president in 2017, for instance, included a public recommendation period and a public town hall. Similarly, directors of the San Francisco Fed are posting detailed logs of their meetings with community, business, and financial groups during their search to find a new president following John Williams' departure in June 2018.

In addition to promoting efforts to democratize the Reserve Bank president and director selection processes, Fed Up's activism on this front has encouraged greater attention to ethnic, gender, and occupational diversity in the Reserve Banks.[20] For instance, Senator Kamala Harris (D-CA) introduced a bill in May 2018 requiring Reserve Bank president search committees to interview at least one minority and one female candidate for each vacancy. The bill came in response to backlash over the appointments of John Williams and Thomas Barkin—both white men and Reserve Bank insiders—to lead the New York and Richmond Feds, respectively. Senator Elizabeth Warren (D-MA), an outspoken proponent of Reserve Bank governance reform, later called on the directors of the New York Fed to testify in front of the Senate Banking Committee to explain their decision (Warren 2018). As she wrote: "The Fed's Board of Governors and the New York Fed should go

[17] Republicans in Congress have proposed moves in the other direction. For example, Rep. Robert Pittenger (R-NC) introduced a bill to reinstate banker directors' participation in the Reserve Bank president appointment process, while Rep. Scott Garrett's (R-NJ) legislation would eliminate the Board of Governors' participation in director selection and give banks full appointment power over the boards.

[18] Following Fed Up's inaugural appearance at Jackson Hole, a right-leaning group, the American Principles Project, held their own protest during the 2015 conference. The event, which advocated for a return to the gold standard, was funded by conservative donor Robert Mercer (Midler 2016).

[19] Beyond institutional reform, Fed Up also lobbies the Fed over its monetary policy. Since the Fed began raising interest rates in 2015 for the first time since the crisis, the coalition has organized demonstrations during FOMC meetings to protest interest rate hikes and advocate for full employment.

[20] As of 2018, the Fed's leadership—Fed governors and presidents of the Reserve Banks—are 80 percent male and 87 percent white. Moreover, 80 percent of governors, presidents, and members of the Reserve Bank boards come from banking or business backgrounds. Among directors, 78 percent were white and 78 percent were male. (Center for Popular Democracy 2018).

out of their way to solicit and consider public input when selecting a new president who will have so much influence over interest rates and Wall Street supervision - instead, they turned the process over to a handful of private individuals and ignored calls to choose one of many qualified alternatives who might have brought a new perspective."

1.2 Relevant Literature

The social science literature on the Federal Reserve System and the politics of monetary policymaking is substantial, encompassing numerous overlapping strains that approach the Fed from a variety of theoretical traditions and substantive angles—including central bank independence (e.g. Alesina and Summers 1993; Shull 1995; Ainsley 2017); FOMC voting behavior (e.g. McGregor 1996; Chappell and McGregor 2000; Meade and Sheets 2005); the foundations and determinants of monetary ideology (e.g. Hibbs 1987; Adolph 2013; Malmendier, Nagel, and Yan 2017); committee deliberation and decisionmaking (e.g. Visser and Swank 2007; Schonhardt-Bailey 2013; Lopez-Moctezuma 2018); appointment politics (e.g. Havrilesky and Gildea 1992; Chang 2003; Schnakenberg, Turner, and Uribe 2017); external pressures on Fed policymaking (e.g. Woolley 1984; Havrilesky 1995; Weise 2008); and historical institutional accounts (Jeong, Miller, and Sobel 2009; Meltzer 2010; Binder and Spindel 2017).[21] This research is almost exclusively focused on the Board of Governors and the FOMC, however. References to the Reserve Banks are largely limited to presidents' participation in the FOMC and the historical development of the Fed's decentralized structure, if they are mentioned at all.[22]

This dissertation departs from much of the contemporary scholarship by focusing on the Reserve Banks in their own right. While the empirical chapters in the dissertation provide more in-depth reviews of the literature relevant to those particular analyses, I draw on two general bodies of research that undergird my focus on Reserve Bank governance: one that speaks to the Fed's relationship with the financial sector, and one that provides a theoretical lens for analyzing private interest involvement in public policymaking more broadly.

1.2.1 Financial Interests and the Fed

The financial sector is the loudest voice in the politics of Federal Reserve policymaking (Reagan 1961; Weise 2008; Corder 2012; Barth, Caprio, and Levine 2012).[23] With respect to monetary policy, financial interests, particularly those firms engaged in traditional commercial lending, are vulnerable to both unanticipated and anticipated inflation and thus

21 For more comprehensive overviews of the literature, see Woolley (1994) and Morris (2002).

22 Much of what we do know about the Reserve Banks come from early qualitative accounts, including reports and investigations commissioned by Congress. See Bopp (1935); Bach (1950); Miller (1961); Brimmer (1972); U.S. House (1976); and Harrison (1991).

23 This literature is consistent with more general surveys of interest group activity in American politics which find that business and corporate interests are more influential in economic policymaking to a degree most other organized interests are not, e.g. Schattschneider (1960); Smith (2000); Schlozman, Verba, and Brady (2012); and Gilens and Page (2014).

have strong preferences for price stability (Epstein and Schor 1990). While some sophisticated financial sector activities, such as foreign exchange trading and money market fund investments, may benefit from higher and more volatile prices, in general banks are relatively inflation-averse over the long run (Peretz 1983; Posen 1995). In fact, Posen (1995) argues that the very foundations of Fed independence are located in the size and organizational strength of the financial sector, the only "interest group that is more committed to price stability than the median voter" and capable of providing the necessary political support for counterinflationary policy.

The co-dependent relationship between the Fed and the financial sector has fueled a popular narrative in which the Fed has been "captured" by the banking interests it regulates (Stigler 1971; Carpenter 2013). While capture appears in different flavors, a dominant form in the Fed literature is "cultural capture" (Kwak 2013). Cultural capture operates through a combination of social, cultural, and intellectual currents, culminating in policy that serves the ends of industry rather than the public. According to this view, the Fed's frequent fraternization with banks professionally and socially leads Fed policymakers to be unusually receptive to banks' demands (Havrilesky 1995; Weise 2008). A consequence is that monetary and regulatory policy processes may be biased in the direction preferred by banks—presumably, toward tighter monetary policy and less intense regulatory enforcement. The salience of bank preferences is enhanced by the relative lack of contact between the Fed and non-financial or non-industry groups. As former AFL-CIO official Markley Roberts noted: "Fed officials don't lunch — or even consult — with consumer or worker representatives." Former Fed governor Sherman Maisel was equally explicit: "The Fed interacts far less frequently with debtor groups or the less wealthy than with the Establishment, which prefers a more restrictive monetary policy" (Woolley 1984). As Woolley (1984) argues, close ties between banks and central bankers "are of political interest primarily because they reinforce the Federal Reserve's special awareness of and sensitivity to the financial community."

One channel through which cultural capture has been institutionalized in the Fed is through the Federal Advisory Council (FAC). The FAC was established in 1935 to accommodate bank representation in monetary policymaking following reforms that shifted authority away from the Reserve Banks and toward the Board of Governors. Composed of twelve financial sector representatives (one selected by each Reserve Bank president), the FAC meets with the Board of Governors at least four times a year by law and advises the Board on both monetary and regulatory policy. Havrilesky (1995) finds that monetary policy is responsive to signals from the banking industry as communicated via FAC directives issued every three months. In an extension of Havrilesky's study, Weise (2008) shows that while the Fed was more responsive to signals from non-financial interests, such as consumer and labor groups, prior to 1979, its policy has since reflected almost exclusive responsiveness to the FAC.[24]

Another channel, of course, is through the Reserve Banks. From early in the Fed's history, the Reserve Banks were identified as vehicles for private interests' corruption of

[24] The Board of Governors established the Community Advisory Council (CAC) in 2015 as a counterbalance to the FAC and its other advisory council, which represents depository institutions. To date, representatives from labor unions, community nonprofits, and academia have served on the CAC.

Fed policymaking, and as potentially lethal threats to the Fed's democratic legitimacy (Bopp 1935; Eccles 1951). Reserve Banks' vulnerability to capture—in both cultural and "stronger," more direct forms—stems from their ownership by local member banks, an arrangement that creates a "clear path of access for the private banks to the FOMC and, consequently, the Board of Governors" and a "formal, legal proximity between the regulated and regulator" (Conti-Brown 2014). Banks thus become direct stakeholders in and key constituents of the Federal Reserve through their holding of Reserve Bank stock. These stockholding banks' participation in the governance of the Reserve Banks through their election of directors creates another layer of access that threatens to bias Fed policymaking away from the public interest and toward narrow special interests. Mayer (1976) notes that the domination of the boards of directors by financial and industrial elites—the "upper reaches of American society"—inflects the boards with a distorted sense of the public interest: "This should not be interpreted as saying that the directors are concerned with the economic interests of a narrow segment of society. But while they do try to represent the public interest, the public interest is amorphous and looks differently to people in different circumstances."

A congressional investigation on the occasion of the Fed's 50th anniversary offers a convenient look into the debate regarding the Reserve Banks' vulnerability to capture by banking interests (U.S. House 1964). Alfred Hayes, then president of the New York, rejected the argument as " fallacious, not only because the bankers, even if they wanted to, could not by such a means exert leverage on the presidents for this purpose, but also because it cynically assumes that the presidents, whose appointments must be approved by the Board of Governors, are men of such little scruple that they would violate their oaths of office as members of the Committee, by subordinating the public good to the private interest." In contrast, economist Milton Friedman testified that banks' representation in Reserve Bank governance could incidentally bias Fed policy away from the public interest: "To [bankers] it seemed perfectly natural and understandable in trying to serve the public interest to place major emphasis on interest rates and credit conditions rather than on the aggregate quantity of money. From this point of view, I think it has been an unfortunate thing that we have had a Reserve bank which has been as closely linked to the banking community and to the lending and investment process as it has, not at all because the individuals are trying to feather their own nests, not for that reason, but because they naturally interpreted the instrument they were dealing with in terms of the environment they knew best and were most familiar with."

In addition, directors' control over Reserve Bank president appointments and presidents' salaries, as well their responsibility for setting compensation for Reserve Bank staff involved in the supervision of local banks, may also serve as mechanisms for more direct forms of capture (Woolley 1984; Shull 2005). Adolph (2013) points to a similar mechanism in which private banks have leverage over central bankers due their ability to influence central bankers' future (post-central bank) career prospects. The Reserve Banks' unusual quasi-private status—along with its day-to-day proximity to financial interests, given the Reserve Banks' role in conducting on-the-ground supervision of banks and serving as the local banking community's own personal banker—thus creates opportunities for "stronger" forms of capture than might exist in the Board of Governors. A story recounted by George Schultz, a former secretary of the Treasury, is suggestive: "I did have an experience that sticks with me. When the New York Fed [presidency] was open, I had a candidate. Alan Greenspan [then Fed chairman] and I had the same candidate. We talked about it....We never even got in the conversation. We were totally out of it. The New York financial people appointed the guy. There was no question about it. They got their man" (Bordo 2016).

Beyond varieties of capture, financial interests also devote significant political resources to lobbying the Fed directly, as well as lobbying members of Congress over legislation related to the Fed. The American Bankers Association and Chamber of Commerce both played an active role in the Fed's founding in 1913 (Chang 2003) and have since served as active participants in Fed policymaking (U.S. House 1976; Peretz 1983). Business Roundtable, another interest group active in macroeconomic policy, was identified in the 1970s as the source of a coordinated industry campaign against legislation that would have subjected the Fed to a complete audit (U.S. House 1976). Arthur Burns, then chair of the Fed, reportedly asked the group to tell its members to flood congressional offices with telegrams in opposition to the bill. A congressional investigation also found that Business Roundtable had prepared speeches for Fed officials. The Fed's reliance on the financial sector for political cover is another facet of their symbiotic relationship and perhaps presents another means for banking interests to exert influence on Fed policymaking.

1.2.2 Political Influence Through Governance

More generally, this dissertation contributes to, and takes inspiration from, an important growing body of literature that revives attention to what Anzia and Moe (forthcoming) term "interest groups on the inside." Taking as its starting point early studies of interest group participation in politics (Schattschneider 1960; Lowi 1969), and building on more recent efforts that shift the locus of American politics from elected officials to organized policy demanding groups (Bawn et al. 2012; Hacker and Pierson 2014), this research examines how special interests work *inside* government to shape public policy. As Anzia and Moe argue, "Interest groups are more than just outsiders that influence government through lobbying and elections. They are often insiders that play official roles within government itself." The Reserve Bank boards of directors—where private bankers directly elect a majority of the Bank's governing board, including from among themselves—provide an almost extreme demonstration of this phenomenon. Just as public-sector unions formally participate in the governance of public pension boards (to take Anzia and Moe's example), financial interests are by legislative design expressly invited to exercise influence inside the Federal Reserve System via the governance of the Reserve Banks. This dissertation thus provides a kind of detailed case study of banking interests working inside a prominent quasi-governmental institution. Moreover, it highlights systems of governance, as well as the authority to appoint key public policymakers, as mechanisms through which private interests may operate inside government and exert both direct and indirect influence on policymaking.[25]

[25] The focus on corporate governance as an instrument of political power is a central feature of the literature of comparative political economy (see Gourevitch 2003 for an overview), but scholars of American politics have begun to take note. In their study of rising income inequality, Hacker and Pierson (2010)

Rudder's (2008) discussion of "public-private governance" provides additional analytic leverage. Rudder defines private governance as "composed of the decision-making processes and the binding decisions of private groups that affect the quality of life and opportunities of a larger public." Public-private governance, then, "combines, to varying degrees and in varying ways, the imprimatur of government on essentially private decision making." As it turns out, the political system is awash with arrangements in which private groups exercise policymaking authority that is practically indistinguishable from that of government. These include credit-rating agencies, business associations, and accounting boards that determine the rules governing public pension solvency (Cutler, Haufler, and Porter 1999; Rudder 2008). While Rudder distinguishes public-private governance from "quasi-governments" like the Fed, the oversight of the Reserve Banks by private boards of directors arguably falls closer to the phenomenon she conceptualizes.

More generally, Rudder's public-private governance arrangements share with the Reserve Banks the same lack of attention from the discipline. As she persuasively argues: "Questions of whose interests get served, who gets to make decisions, how these participants view the world and their tasks, whether conflicts of interest are built into schemes of private governance, and how a larger public is affected by privately made decisions are ones that should be of particular interest to political scientists. To the degree that the constitutional order, its protections and forms, are eclipsed by private and public-private governance, political science must pay attention."[26]

1.3 A Seat at the Table: Fed Governance As Influence

I argue that the participation of the boards of directors in Reserve Bank governance is a critical, though poorly understood, avenue through which financial interests may influence the policymaking process. Banks participate directly in the governance of the Reserve Banks, both by electing board members and sitting on the boards themselves. This has important policy consequences given the responsibilities the boards have for overseeing the Reserve Banks and appointing Reserve Bank presidents.

The boards have a deeper significance as well. While much of the literature seems to dismiss directors on grounds that their influence is limited to an advisory or even merely decorative role, whether or not directors are influential is in some sense beside the point. Bank influence is built into the institutional structure of the Fed through the boards of directors. This is a slightly different way of thinking about political influence than considering whether lobbying efforts or dollars contributed predict policy outcomes or provide access to key policymakers. Banks' access to policymaking is a feature of the system, not a bug. As a formal component of the governance structure—effectively overseeing the institution that regulates them and choosing the individuals who will determine the eco-

write: "The structure of American corporate governance—and its associated, distinctive patterns of executive compensation—is a prime contributor to American winner-take-all-inequality. To a considerable if largely unrecognized extent this is a *political* outcome."

26 The *language* of political science itself reinforces ignorance of public-private systems of governance. For instance, the term "public policy" inherently seems to exclude government-like rules and policies that are established by non-governmental actors (Rudder 2008)

nomic policies that directly impact their bottom lines—banks have a direct line to ensure their policy preferences are baked into the organization.

In short, by having a seat at the table in the governance of important policymaking institutions, directors and banks wield a public authority that guarantees them a stable and protected means to pursue policy change. This *is* influence. Even if it were the case that directors serve a merely marginal advisory role, or affect policy in exceedingly indirect ways—assumptions not empirically validated in the existing literature—their formal participation in the Reserve Banks' system of governance is a pathway for financial interests to amplify their voice in government. Thus, in addition to lobbying legislators and donating to campaigns, banks have an opportunity open to them that is, by design, not available to other special interests: they can govern. Understanding how and to what extent banks make use of this opportunity is of critical interest for understanding how the banking sector participates in the policymaking process.

Beyond this central argument, I put forth two broad claims that are intended to prompt a rethinking of the Reserve Banks in the literature. First, the Reserve Banks' ownership by private economic interests and the lack of direct participation by elected officials in their governance have led political scientists to dismiss the Reserve Banks as somehow less "political" than the Board of Governors and the FOMC. This is misleading. For one, the Reserve Banks are clearly institutions of political contention. As discussed above, the Reserve Banks and their boards have been perennial subjects of congressional debate. More fundamentally, the Board of Governors, the "public" tier of the Fed, appoints one-third of the directors in each Reserve district and may veto the appointments of presidents and other directors. The Reserve Banks are also, of course, legislative creations of Congress and subject to its oversight. By their very nature, then, the Reserve Banks are imbued with a public character—irrespective of their "private" incorporation. As Binder and Spindel (2017) write, "Institutions are political not because they are permeated by partisan decision making but rather because political forces endow them with the power to exercise public authority on behalf of a diverse and at times polarized nation."

The notion that the Reserve Banks and their governance by boards of directors are inherently political is not intended as a smear or an attack on the Fed's independence, but as a simple admission of fact. Reserve Banks were created by Congress and play an important role in the conduct of public policy. Congress endowed the Reserve Bank directors, private citizens, with the authority to handpick twelve of the most important policymakers in the country. Just as political scientists have fruitfully analyzed the FOMC and Board of Governors as political institutions, I argue that the Reserve Banks—a key component of the Federal Reserve System—naturally deserve similar treatment.[27]

A second and related claim is that much of the existing scholarship tends to ignore the politics inherent in the financial sector's participation in Reserve Bank governance. The private ownership of the Reserve Banks by local banks underscores a crucial point: while

[27] A defining theme of the literature on the Fed is that it is a political institution, vulnerable to political and interest group influence despite its statutory independence. See Meltzer (2011) for an overview. As Greider (1987) argues: the Fed is not a "cloistered sanctuary where disinterested experts make authoritative calculations about the future of the economy, 'above' politics and protected from the messy claims of special interests that surround the Congress and the President."

the Fed is designed to be "politically" independent, it is not independent of private banks (Barth, Caprio, and Levine 2012). There is something paradoxical about this distinction. Banks are key stakeholders in the Federal Reserve System. Many own stock in their Reserve Banks and have a say in the appointment of its leadership. Banks are also, of course, special interests. While this is universally recognized in studies of the FOMC and monetary policymaking more broadly (e.g. Woolley 1984; Havrilesky 1995), empirical studies of the Fed largely dismiss the appointment of Reserve Bank presidents as a private—and, implicitly, apolitical—process. This is problematic to the extent that we believe interest groups play an important role in the policymaking process and that the financial sector has interests that might diverge from the public.

In sum, accepting the Reserve Banks' private status as grounds for their sidelining in the literature requires accepting a limited view of what politics is: one that emphasizes the direct participation of elected officials. But we know politics encompasses much more than that. The ownership of policymaking institutions by private banks; the formal participation of banks in selecting the individuals who govern these institutions; private citizens' direct selection of key policymakers; privately appointed policymakers voting on interest rates and managing bank supervision—these are all political phenomena that are central to our understanding of how public policy is made and how political influence is exercised.

1.4 Methodological Approach

An obstacle confronting scholars of the Federal Reserve System is a relative lack of observable information. The Fed's opacity—compounded by its public-private organizational structure and its seemingly paradoxical "independence within government"—is well known and in fact instrumental to its influence as a policymaker. This presents challenges for efforts to glean details about the internal processes that structure Fed policymaking and the individuals and interests that participate in these processes.

Studying the Reserve Banks aggravates these challenges. As the "private" component of the Fed, the Reserve Banks and the cadre of private citizens serving on their boards are not subject to the same standards of transparency that bind the rest of the System. The Freedom of Information Act (FOIA), for example, applies to the Board of Governors but not to the Reserve Banks.[28] Moreover, much of policymaking activity conducted inside the Reserve Banks is unobserved. Minutes and transcripts of Reserve Bank board meetings are generally confidential, as are directors' individual votes on the discount rate. This leaves Reserve Bank researchers with few of the data sources commonly employed in studies of the FOMC and the politics of monetary policy. The observational challenges in this domain pose difficulties not only for inferring directors' potential policy preferences, but also for developing a basic understanding of what directors do, what influence they have, and how the Reserve Banks' system of governance operates in practice.

28 The Reserve Banks maintain they are not subject to FOIA because they are not federal agencies under the Act's definition. This was affirmed by the D.C. Circuit in 2010, though the opinion did not definitively resolve the question of the Banks' status. See Karlson (2010).

I attempt to overcome these obstacles by drawing on a wide variety of sources that offer a window into the actors and processes that underlie Reserve Bank governance. These include campaign contribution histories, open-source biographical records, FOIAed Reserve Bank documents, and a new survey of Reserve Bank directors. I leverage this information to construct three original datasets, each of which offer granular insight into a different aspect of the directorates: their ideological composition; the process by which directors are selected; and directors' first-hand accounts of board activities and influence. I also contextualize the data with anecdotes and historical background culled from the Fed's archives. Each of the new data form the basis of an empirical chapter in the dissertation. As each chapter investigates a different aspect of Reserve Bank governance, they can be accessed as stand-alone inquiries.

This dissertation is unusual in the sense that it is primarily descriptive. Its overarching objective is to gain general insights into an institution that has not seriously been put under a microscope, rather than to infer causal relationships or even evaluate correlations between independent and dependent variables. This is not to suggest that causal identification and inference are impossible or undesirable in this domain. At heart, the research questions underlying this project are causal in nature. Are directors influential in policymaking? If the boards did not exist and Reserve Bank presidents were chosen by politicians (as some members of Congress propose), would the Fed's monetary policy or its efficacy as a regulator be any different than what we observe today? Additionally, does the ideological composition of the boards matter? If we shifted directors' mean ideology one or two standard deviations to the left, would we observe the selection of more dovish presidents, and thus more expansionary monetary policy? These counterfactuals are difficult to simulate: institutional changes to the boards that might be leveraged for identification are rare, and the causal chains linking directors' decisions to policy outcomes are complicated.[29] More generally, as scholars of interest groups and capture have noted, assembling causal evidence of policy influence is especially challenging given the difficulty of discerning groups' preferences and motives, and even of observing the mechanisms of influence in action (e.g. Hacker and Pierson 2002; Schlozman, Verba, and Brady 2012; Carpenter 2013).[30] Nonetheless, the hope is that by documenting basic institutional details about the boards—who serves on them, how they are composed, and what they do—we can erect a foundation upon which future theoretical and empirical work can build. I thus view this project as exploratory and a necessary first step toward integrating the study of Reserve Bank governance into the social science literature.

[29] An old congressional report provides a nice summary of the challenges here: "'The influence of the directors of the Federal Reserve banks on the formulation of monetary policy is in large part intangible and is both difficult and unrewarding to measure and to define" (U.S. Congress 1952). Similarly, see Bach (1950): "Reserve Bank influence is relatively informal, exercised through discussion and correspondence with the (BOG) board members more than through formal voting strength."

[30] Creative examples with respect to the Fed exist, however. See Finer (2018), who uses tax ride data to provide evidence of New York Fed information leaks to banks immediately prior to FOMC meetings.

1.5 Plan of the Dissertation

The remainder of this dissertation is organized as follows. In Chapter 2, I provide a brief historical and institutional overview of the Reserve Banks and the Federal Reserve System more broadly.

Chapter 3 investigates the political ideologies of Reserve Bank directors. I introduce a new, hand-collected dataset that describes the professional and educational histories, interest group affiliations, and political donation behavior for individuals who served as directors over the last 40 years. Consisting of nearly 4,000 individual-year observations, these granular data enable me to examine how directors' political preferences vary across Reserve districts, director classes, and over time. I show that Reserve Bank directors are more likely to contribute to campaigns, more likely to donate to Republicans, and more conservative than the average campaign donor in the United States. Bankers serving on the boards of directors, moreover, are more conservative than their non-banker counterparts. I also find ideological variation across Reserve districts: the directors of the Boston and New York Federal Reserve Banks are significantly less conservative than directors at the ten other Reserve Banks, even after controlling for director's individual and geographic characteristics. Taken together, the results provide a window into the political leanings of the private citizens who govern the Reserve Banks.

Having established the ideological and biographical profiles of directors, Chapter 4 examines one of the selection processes that generates these outcomes: the election of directors by member banks. The chapter draws on an original dataset of Class A and Class B director elections between 1980 and 2015 that describes the candidates running for election and the election outcomes. In the first part of the chapter, I describe the contours of the electoral landscape and document variation in election dynamics across multiple dimensions, including Reserve Bank, director class, and member bank group. The second part of the chapter explores theoretical explanations for the observed election dynamics. I demonstrate that director elections are rarely contested, though contestation varies considerably across Reserve district. Among races that are contested, the candidate with the most nominations is significantly more likely to win. The analysis provides suggestive evidence that low contestation in these elections may be explained by the important role local banking associations play in coordinating the nominations of director candidates.

Chapter 5 attempts to validate the findings from the previous chapters and shed further light on how the Reserve Bank boards operate in practice by asking directors about their service experiences firsthand. The chapter presents the results of an online survey of former and sitting Reserve Bank directors in which respondents were asked to reflect on a wide variety of issues, including: the director selection process, the scope of directors' responsibilities, Reserve Bank president appointments, and the tenor of board deliberations. The objective of the survey was to uncover details that offer descriptive insight that may inform the development of much-needed theoretical work in the domain of Reserve Bank governance. The responses suggest that director recruitment processes are highly networked; that banking associations play active roles in selecting directors; that directors perceive themselves to be influential in monetary policymaking; and that Reserve Bank presidents and staff largely dictate discount rate recommendations. More generally, the survey illustrates that director experiences may vary considerably, even within the same

Reserve Bank. While the survey sample is quite small, it nevertheless provides a new look into the dynamics of Reserve Bank governance and the views of directors themselves.

Finally, in Chapter 6, I summarize key findings, describe the implications of the results for our understanding of the Reserve Banks and financial sector participation in policy-making, and outline a new research agenda on Reserve Bank governance.

Chapter 2

The Federal Reserve System: Background

> "The System had originally been designed to represent a blend of private and public interests and of decentralized and centralized authorities, but this arrangement had become unbalanced. Private interests, acting through the Reserve Banks, had made the System an effective instrument by which private interests alone could be served. The Board in Washington, on the other hand, which was supposed to represent and safeguard the public interest, was powerless to do so under the existing law and in the face of the opposition offered by the men who ran the Reserve Banks throughout the country."
> — Marriner Eccles, Chairman of the Federal Reserve Board, 1934-1948.[1]

The history of the Federal Reserve's founding is vital to understanding both the Fed's unusual institutional structure and the longstanding tension between its public and private poles. In this chapter, I provide a brief overview of its history and basic components.

2.1 Overview

The Federal Reserve System was established with the 1913 Federal Reserve Act. Its passage followed contentious debate both in and outside of Congress over the proposed central bank's distribution of power. For some, the establishment of any central bank was a non-starter. These opponents, channeling the spirit of Andrew Jackson, warned that a central bank would institutionalize a monopoly over the money supply to the benefit of big-city bankers. By contrast, the most ardent proponents of a central bank argued that not only should one exist but it should be owned and operated by commercial

[1] Eccles (1951). As recounted in Todd (1994), Eccles accepted President Roosevelt's offer to serve as chairman only under the condition that the Fed be fundamentally restructured. He was instrumental in drafting the 1935 Banking Act, which shifted power away from the Reserve Banks and centralized the Fed's authority in the Board of Governors.

banks (Meltzer 2010). As Chang (2003) notes, three interests in particular—small and rural country banks concentrated in the southern and western United States, Midwestern city bankers, and Eastern financiers—clashed over whether control over monetary policy would be centralized in a New York-based body run by bankers (as financiers hoped), or whether it would be distributed across the country to ensure that no one interest group or region would dominate (as most country and some city bankers, who opposed the idea of a central bank in the first place, preferred).The political parties staked their positions in the debate as well, with Republicans in Congress supporting a banker-run central bank led by the Eastern financiers, while Democrats supported a largely decentralized system with government appointment power.

The legislation reflected a political compromise in which regional Reserve Banks would be statutorily subordinate to a national "Federal Reserve Board"—composed of seven political appointees, including the Secretary of the Treasury—but have power to set their own discount rates and conduct their own open market operations.[2] As H.H. Parker Willis, one of the chief drafters of the 1913 Act argued, the establishment of Reserve Banks was intended to ensure "local control" of monetary policy given variation in regional economic conditions. The end result was an unusual public-private hybrid, with a "public" body composed of political appointees based in Washington D.C. overseeing a "private" constellation of regional banks owned and governed by private financial institutions.[3]

In the wake of the Great Depression, Congress reformed the Federal Reserve with the Banking Acts of 1933 and 1935, centralizing the Fed's policymaking responsibilities in the newly created "Federal Open Market Committee" (FOMC) and reducing the autonomy of the Reserve Banks in the process.[4] Rather than setting their own monetary policies, Reserve Banks would be a minority in the FOMC, with five presidents serving single-year terms on a rotating basis. This inclusion of the Reserve Bank presidents on the FOMC was proposed by the American Bankers Association (ABA), which Marriner Eccles, then chairman of the Fed, accepted as a compromise to his own position that the presidents should be relegated to advisory roles in setting open market policy (Meltzer 2010). The political appointees composing the restructured Board of Governors would hold the ma-

2 Bach (1950) notes that bankers widely assumed they would be given representation on whatever board was created to supervise the Reserve System. President Woodrow Wilson, however, opposed any degree of formal banker representation, anticipating that bankers would frustrate the Board's supervisory authority and would generally resist restrictive credit policies.

3 Ambiguity over the Fed's "public" status has existed since its inception. Greider (1987) provides an illustrative example: when the Federal Reserve's headquarters in Washington D.C. was completed in 1937, Rep. Wright Patman (D-TX)—proud populist and arch-foe of the Fed—argued that it was not eligible for the public property tax exemption because it was owned by the privately incorporated Reserve Banks. Upon receiving a tax bill, the Board of Governors refused to pay, arguing that the Federal Reserve System was an "independent department" within government. It took more than three years of legal wrangling for the Fed's lawyers to convince D.C. it was a government body and thus could enjoy the tax exemption. Decades later, in 1952, a survey commissioned by Patman asked Reserve Bank presidents to define their status. They answered: "In our opinion, Federal Reserve banks are partially part of the private economy and are part of the functioning of the Government (although not technically a part of the Government)" (U.S. Congress 1952).

4 Eccles (1951) claimed that the Fed's failure to prevent the Great Depression stemmed from decentralization of the Fed's policymaking authority and bankers' hijacking of the Reserve Banks.

jority on the FOMC and set the discount rate, taking into account recommendations from the Reserve Banks. The empowerment of the Board of Governors at the expense of the Reserve Banks had the effect of creating a more hierarchical Federal Reserve System in which the Board of Governors plays the lead role in monetary policymaking. This structure—resembling, as Reagan (1961) notes, a pyramid with a private base (the Reserve Banks), a mixed middle level (the FOMC), and a public apex (the Board of Governors)—has largely remained the same since 1935, even as the Fed's responsibilities have grown. Figure 2.1 provides a simple overview of the key tiers of the Federal Reserve System.

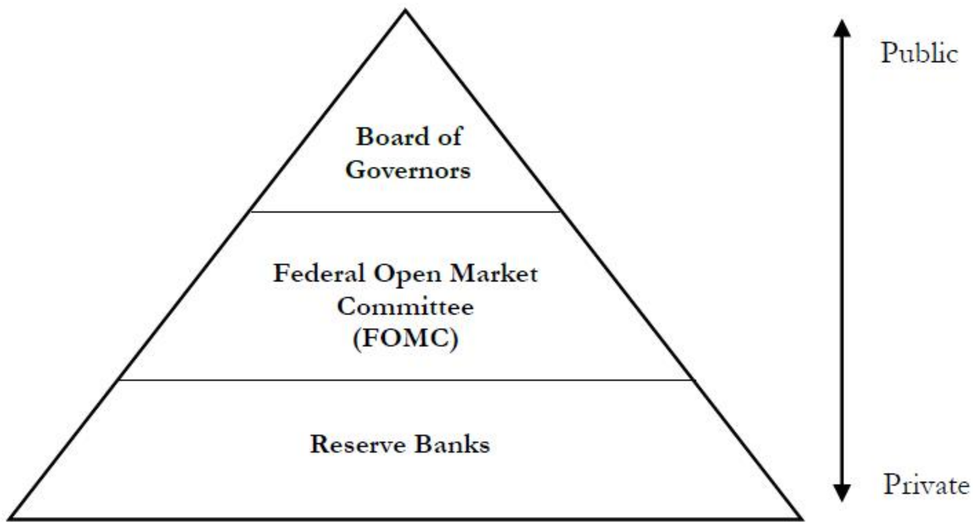


Figure 2.1: Overview of the Federal Reserve System

In addition to creating the modern Federal Reserve, the 1935 Act was a turning point in the tug-of-war between the Reserve Banks (particularly the New York Fed) and the Board of Governors that has punctuated the Fed's century-long history. While conflict between the tiers continues to break out, the Board has steadily consolidated power over the Reserve Banks since the 1930s. To take a recent example, the implementation of the "Triangle Document," a 2010 directive from the Board of Governors to centralize bank supervisory activities within the Board—bank examiners within the Reserve Banks now report to a 16-person committee in D.C. rather than to their respective Reserve Bank presidents—recalls the centralization of the Fed's monetary policymaking authority in 1935 (Hilsenrath 2015). These power struggles between the public and private tiers of the Fed are not solely matters of process. As Meltzer (2011) argues, these are "political acts" consequential precisely because "changes in the locus of power affect the choices of policies." For this reason, the Fed's institutional design—and its efficacy in conducting monetary policy, regulating the financial sector, and performing its other congressionally mandated responsibilities—cannot be understood without context of the historical tensions between the Board and the Reserve Banks.

2.2 Tiers of the System

Table 2.1 summarizes the composition and responsibilities of each of the tiers of the Federal Reserve System. Each tier is described in further detail below.

Tier	Composed of	Appointment Structure	Key Responsibilities
Board of Governors (BOG)	• 7 members based in Washington D.C. • Led by chairman and vice chairman	• Appointed by POTUS, confirmed by Senate • 14-year non-renewable terms (though may be appointed to serve unfinished term)	• Set reserve requirements • Set discount rate • Oversee Reserve Banks and rest of System • Supervise foreign banks operating in US • Conduct research
Federal Open Market Committee (FOMC)	• 12 voting members: 7 governors + 5 Reserve Bank presidents • BOG chairman serves as FOMC chairman; NY Fed president serves as vice chair • Non-voting Bank presidents participate in deliberations	• 7 governors + NY Fed president, always • Remaining 4 voting spots filled by 11 other Reserve Bank presidents on rotating basis for 1-year terms	• Meet 8 times a year to vote on target federal funds rate
Reserve Banks	• 12 privately-owned banks, distributed across U.S. according to 1913 Act boundaries • Each led by a president	• Presidents appointed by 9-member district board of directors • 5-year renewable terms • Appointments subject to BoG veto	• Administer monetary policies of the FOMC • Supervise and regulate banks within district • Provide fiscal agency services • Conduct research

Table 2.1: Tiers of the Federal Reserve System

2.2.1 Board of Governors

As the only component of the Federal Reserve System directly appointed by elected officials, the seven-member Board of Governors is the Fed's link to the American electorate and the primary source of its democratic accountability. Governors are appointed by the President and confirmed by the Senate to 14-year terms. As the public face of the Fed, the Board chairman testifies in front of Congress twice a year. The Board exercises broad supervision of the Federal Reserve System while also setting reserve requirements for depository institutions and approving changes to one of the Fed's key monetary policy tools, the discount rate (the interest rate at which banks may borrow from their local Reserve Banks' "discount window" in order to meet their reserve requirement). The Board is also responsible for writing regulatory rules, supervising financial institutions, and enforcing compliance with regulations. As discussed below, however, some of these supervisory tasks have been delegated to the Reserve Banks.

2.2.2 FOMC

Composed of the seven politically appointed Fed governors, the president of the Reserve Bank of New York, and four of the remaining Reserve Bank presidents, the FOMC is the Fed's deliberative monetary policymaking body which meets in Washington D.C. at least eight times a year. The primary goal of each meeting is to set the target for the Fed's most important monetary policy instrument, the federal funds rate (the interest rate at which banks may lend funds to each other overnight). Along with the discount rate—which is determined by the Board after reviewing recommendations from the directors of the Reserve Banks—the Fed uses the federal funds rate to influence the trajectory of longer-term interest rates in the economy and, ultimately, the supply of money and credit.[5] The privileged position of the New York Fed in the FOMC—the New York Fed president is a permanent voting member and traditionally serves as vice-chair of the committee—reflects the New York Fed's unique responsibility for implementing the FOMC's chosen policies: to achieve the target rate, the New York Fed's Open Market Trading Desk conducts the requisite purchases and sales of government securities. Since the passage of the Humphrey-Hawkins Act in 1977, the FOMC is obligated to target the federal funds rate at a level that will support its dual mandate of price stability (via moderate long-term interest rates) and full employment. The New York Fed's Second District is also home to the largest and most powerful financial institutions in the country, endowing it with special insight into, and relationships with, key financial power players.

Who Votes?					
Always Votes		Rotating Vote (1 president from each group)			
Chairman of BoG (Chair of FOMC) + Six Governors	President of the New York Fed (Vice Chair of FOMC)	Group 1	Group 2	Group 3	Group 4
		Boston	Chicago	Atlanta	Kansas City
		Philadelphia	Cleveland	Dallas	Minneapolis
		Richmond		St. Louis	San Francisco

Table 2.2: FOMC Voting Schedule

The rotation of Reserve Bank presidents in and out of the FOMC each year was defined by Congress in 1942. As Table 2.2 shows, the schedule assigns each Reserve Bank to a group and allows for rotation within those groups, presumably to maintain a general balance of regional representation in the FOMC each year.[6] Crucially, although only five Reserve Bank presidents vote in the FOMC at a time, all presidents attend and participate in the policy deliberations. All presidents, voting or not, are also expected to share information on the state of their district economy in advance of FOMC meetings.

At the end of each FOMC meeting, the group releases to the public a policy statement denoting the federal funds rate target, an brief explanation of its actions, the tally

[5] For a comprehensive account of the mechanics of monetary policymaking, see Blinder (1998).

[6] Contemporary observers may come to the conclusion that regional representation in the FOMC is rather imbalanced. There are years, for example, in which the entire western United States is not represented through voting presidents.

of voting members who supported the chosen target, and the preferred action of those who dissented. Minutes of the meeting are released three weeks later, while verbatim transcripts are released with a 5-year lag.

2.2.3 Reserve Banks

The twelve Reserve Banks are distributed across the United States according to the original boundaries drawn in 1914. As Figure 2.2 suggests, the distribution is a relic of the early 20th century, when the country's population and economic activity were concentrated in the eastern part of the country. Indeed, eight of the 12 Reserve Banks were created east of the Mississippi, though recent proposals have called to either redistribute or create new Reserve Banks to reflect the westward move of the population, where more than 40 percent of the country now lives (e.g. Dearie 2015).

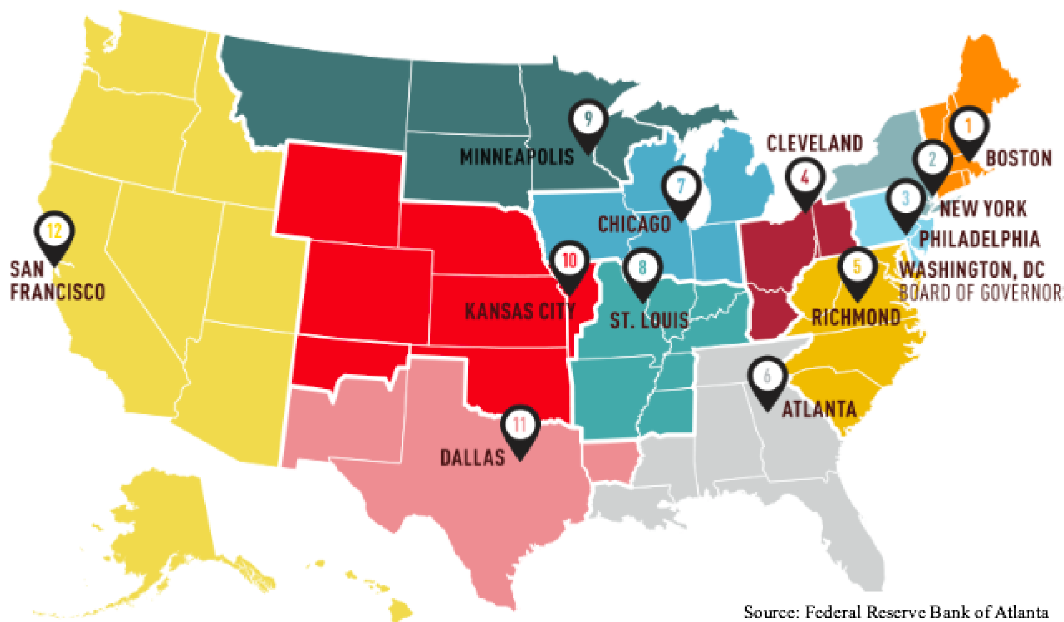


Figure 2.2: Federal Reserve Districts

Each Reserve Bank is tasked with implementing the Fed's monetary policy and acting as the designated fiscal agent and depository institution for banks and financial institutions within its district.[7] The Reserve Banks also conduct research, process checks and

[7] The 1913 Act provided for a committee to determine the number and location of Reserve Banks. Republicans lobbied for a small number of Reserve Banks (between three and 15) while Democrats wanted as many as 50. Ultimately, 12 cities were selected from 37 that applied. The committee's decisions were accused of being driven by political pressure, leading the Fed to publish a defense. See Havrilesky 1995 and Binder and Spindel 2013.

online payments, evaluate bank merger and acquisition applications, and perform on-the-ground supervision of banks and financial institutions within their districts.[8]

A more obscure function the Reserve Banks perform is bolstering the Fed's institutional independence from political pressure. As Meltzer (2010) notes, the Reserve Banks' ownership by private banks and the insulation of presidents from the electoral process are critical sources of Fed independence, allowing it to operate with greater policymaking autonomy than any other agency in government. The Reserve Banks also provide the System with a firewall of political support inside Congress. By locating Fed operating arms around the country, lawmakers fortunate enough to have one (or two, in the case of Missouri) established within their state lines will rally to protect it when under legislative threat (Binder and Spindel 2017).[9]

As the "private" component of the Federal Reserve System, the Reserve Banks bear a structural resemblance to private sector corporations. Reserve Banks are considered private employers; presidents' salaries are determined by each Reserve Banks' board of directors, just as corporate boards determine the compensation for their chief executives. This is in contrast to the Board of Governors, whose workers (including the governors themselves) are federal employees, with salaries determined by Congress.[10] Each Reserve Bank is privately incorporated and issues equity shares to their stockholders: banks located within the district that are members of the Federal Reserve System. About one-third of all commercial banks in the U.S., or about 1,700 institutions, were members of the Federal Reserve System in 2017.[11] This includes all national banks, which are required by law to join the System, and state-chartered banks that elect membership and meet specified application requirements. Member banks receive an annual dividend of 6 percent on their Reserve Bank stock, as specified by Congress.[12]

Each Reserve Bank is overseen by a board of directors composed of nine members, three of whom are appointed by the Board of Governors ("Class C" directors) and six of whom are elected by member banks ("Class A" and "Class B" directors). Figure 2.3 provides a graphical depiction of the Reserve Bank boards. In some respects, the boards

8 Most of the Reserve Banks have branches outside the headquarter city. The branches are also led by directorates, with the majority of directors selected by the Reserve Bank and the rest appointed by the Board of Governors. The analyses in this dissertation exclude the Reserve Bank branches.

9 This is not lost on the Board of Governors. As Frederic Mishkin, a George W. Bush appointee to the Board, said in an August 2008 FOMC meeting with respect to Reserve Bank presidents and staff: "there's a group of people out there who are not in Washington or New York (because people also have a hard time about New York) but who tend to be very important supporters for us politically. So this is a system that I would very much like to see preserved." See https://www.federalreserve.gov/monetarypolicy/files/FOMC20080805meeting.pdf, pg. 124.

10 The chair of the Federal Reserve, Janet Yellen, earned about $200,000 in 2017, well below the lowest-paid Reserve Bank president, James Bullard of St. Louis, who earned $359,000. The highest-paid president,Bill Dudley of New York, earned $470,000.

11 Board of Governors. Annual Report 2017, Statistical Tables, Table 5: "Banking offices and banks affiliated with bank holding companies in the United States, December 31, 2016 and 2017."

12 The dividend Reserve Banks pay to member banks is a frequent target for progressive activists, who argue it amounts to a generous subsidy for Wall Street. In 2015, Congress passed the "Fixing America's Surface Transportation Act" (FAST Act), which paid for highway construction funds by cutting the annual dividend rate for big banks. The ABA filed a lawsuit against the government in 2017, arguing that the dividends cut was a breach of contract.

serve a similar role as corporate director boards. Like many corporate directors, directors of the Reserve Banks serve 3-year staggered terms, oversee budgets, provide risk oversight, evaluate the performance and compensation of top officials, and appoint the organization's chief executive—the Reserve Bank president.[13]

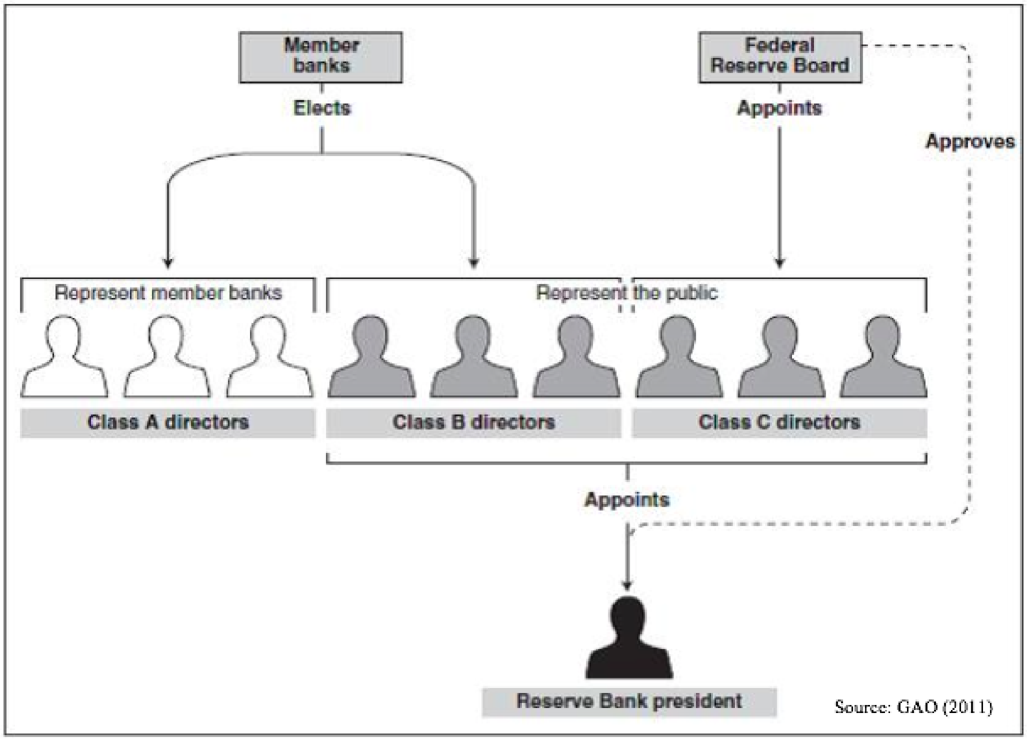


Figure 2.3: Reserve Bank Board of Directors

In other respects, however, Reserve Bank boards resemble public bodies. Crucially, the boards are statutorily obligated to operate in the public interest rather than in the interest of stockholders, an objective reflected in the trifurcation of directors into classes. While the three Class A directors are elected by their peers to serve as representatives of stockholding banks, Class B and Class C directors serve as representatives of the public. The result is though a majority of directors are selected by private banks, a majority also formally represents the public interest. The public interest is further protected by the Board of Governors which, in addition to appointing Class C directors, has formal power to veto the selection of Reserve Bank directors and presidents, as well as to remove directors and staff from office.

The director classes are also distinguished by eligibility requirements and responsibilities designed to minimize conflicts of interest. While Class A directors may be officers and directors of commercial banks, Class B and Class C directors—who should be

13 A two-term limit has been the norm since early in the Fed's history, though it was never formalized in legislation. Proponents of including formal tenure limits in the 1935 Banking Act cited concerns that directors who had served for long periods "overawed" and dominated other directors (Bopp 1935). The Federal Reserve's bylaws now specify two-term limits, with an allowance for exceptions.

Table 2.3: Overview of Federal Reserve Director Classes

	Class A	**Class B**	**Class C**
Appointed by	Banks	Banks	Board of Governors
Represent	Banks	Public	Public
Eligibility	May be employee, director, and officer of bank	May not be employee, director, or officer of any bank	May not be employee, director, or officer of any bank
	May hold bank stock	May hold bank stock	May not hold bank stock
Common sector	Banking, finance	Industry, non-bank finance	Industry, academia

selected, according to the Federal Reserve Reform Act of 1977, with "due but not exclusive consideration to the interests of agriculture, commerce, industry, services, labor and consumers"—may not be bank employees at the time of appointment. Class C directors, moreover, are prohibited from holding stock in any bank. In practice, the statutory requirements governing director classes has produced a fairly predictable pattern of "types" filling each class. As the only director class that may be filled by a banker, Class A directors are almost always executives of banks. Class B directors tend to be executives of local industry or non-bank financial institutions, presumably providing representation to borrowers in the community.[14] Class C directors, the only class appointed by non-local principals, are most commonly pulled from local business, nonprofits, and academic institutions. Though all directors are prohibited from participating in any matter related to banking supervision, Class B and C directors are involved in making hiring and compensation decisions for Reserve Bank employees working on bank supervision. With the passage of the Dodd-Frank Act, Class A directors are also now excluded from participating in the appointment of Reserve Bank presidents and vice presidents, though they may still provide input to the search committee. The Board of Governors recently extended these restrictions to Class B directors affiliated with institutions supervised by the Fed. Table 2.3 provides a summary of the differences between director classes.

The public character of the Reserve Bank boards is additionally reflected in directors' direct participation in monetary policymaking. Every 14 days, directors from each Reserve Bank vote to recommend a discount rate—the interest rate at which private banks may borrow from the local Reserve Bank's "discount window" in order to meet their reserve requirement—to the Board of Governors. While the Board of Governors need not follow the recommendations, it is constrained by how far it can veer from them. The discount rate votes are supplemented with monthly meetings between directors and the Reserve Bank president in preparation for the president's meetings with the FOMC. Di-

[14] The intention of having member banks elect three bankers and three businesspeople was to give representation to both lenders and borrowers in the community (Shull 2005).

rectors are also consulted for the Board's publication of the "Beige Book", an anecdotal survey of local economic trends that is disseminated to FOMC members a week before the policymaking meeting. The boards' role thus extends beyond traditional corporate governance. Directors help inform the monetary policy debate, select the Reserve Bank presidents that vote in the FOMC, and guide the establishment of a national interest rate.

Chapter 3

Who Governs the Federal Reserve Banks?[1]

> "This Committee has observed for many years the influence of private interests over the essentially public responsibilities of the Federal Reserve System. As the study makes clear, it is difficult to imagine a more narrowly-based board of directors for a public agency than has been gathered together for the twelve banks of the Federal Reserve System." — Rep. Henry S. Reuss (D-WI).[2]

This chapter explores the political ideologies and biographical characteristics of the boards of directors. Drawing on the Database on Ideology, Money in Politics, and Elections (DIME, Bonica 2016a) and an original dataset of all directors serving between 1975 and 2015, I present four main findings. First, relative to the population of campaign contributors in the U.S., Reserve Bank directors make more donations, are more likely to donate to Republicans, and are more politically conservative. Directors are also more conservative than governors of the Federal Reserve Board and directors of Fortune 500 companies. Second, bankers serving on the boards of directors (Class A directors) are significantly more conservative than non-bankers, even those that are elected by bankers (Class B directors). Third, the directors of the Boston and New York Reserve Banks are less conservative than the directorates of the 10 other Reserve Banks and are the only directorates to have average ideology scores on the "liberal" side of the spectrum. Finally, directors' average conservatism has declined steadily over the last 40 years.

While this analysis is primarily descriptive, it is the first to my knowledge to provide a window into the political leanings of the private citizens who govern the Federal Reserve

1 I am grateful to Sudeshna Barman, Frances Fitzgerald, Zachary Fry, Mitchel Kwok, and Denny Lai for excellent research assistance. I also thank John Paul Rollert for providing access to BoardEx data and seminar participants at UC Berkeley, the American Political Science Association annual meeting, and the Association for Public Policy Analysis and Management fall conference for valuable comments.

2 Forward to a 1976 study of the Reserve Bank directors by the House Committee on Banking, Currency, and Housing (U.S. House 1976). Reuss, who served in Congress from 1955-1983, was chairman of the committee and a longtime foe of the Fed. Indeed, as noted briefly in Chapter 1, Reuss sued the Fed on grounds that the Reserve Bank president appointment process was unconstitutional.

Banks. In doing so, the analysis complements existing work in political science and economics on the political ideologies and policy preferences of Federal Reserve governors and Reserve Bank presidents. It also contributes to a burgeoning body of literature, pioneered by Bonica (2014), that brings campaign contribution data to bear to uncover the ideologies of unelected political actors whose policy influence is often difficult to observe.

The remainder of this paper is organized as follows. In Section 4.2, I review existing work on monetary policy ideology and outline my theoretical expectations of Reserve Bank director ideology in Section 3.2. I then describe the sample and the campaign contribution data employed to measure director political ideology in Section 5.1. Section 5.2 presents descriptive results, followed by results of regression analyses in Section 3.5. Finally, Section 5.3 discusses the implications of the findings for future research on the Federal Reserve System.

3.1 Related Literature

While little scholarship has focused attention on the Reserve Banks and the boards of directors, a large body of empirical work on the relationship between individual-level personal characteristics and latent monetary policy preferences provides a starting point for identifying potential sources of variation in Reserve Bank director political ideology and policy preferences.[3]

Most relevant to this analysis, preferences over monetary policy are strongly correlated with, and heterogeneous with respect to, party identification and political ideology. Among both political elites and the public, Republicans and conservatives are more inflation averse than Democrats and liberals (Beck 1984; Hibbs 1987; Alesina and Rosenthal 1995; Havrilesky 1995).[4] Gallup polls, for instance, show that respondents who identify as Republican or conservative are up to 20 percentage points more likely to be "very concerned" about inflation than self-identifying Democrats or liberals. The link between partisanship and monetary ideology is further observed in White House appointment strategies for filling vacant seats on the Board of Governors, with Democratic administrations reliably appointing monetary "doves" to the Board of Governors and Republican administrations appointing relative "hawks" (Havrilesky and Gildea 1992; Chang 2003; Chappell, McGregor, and Vermilyea 2005).[5]

3 While this literature focuses on preferences over monetary policy, the relationship between regulatory policy preferences and personal characteristics such as partisanship and profession is also well documented. Republicans and ideological conservatives, among both political elites and the public, are generally associated with preferences for financial deregulation policies while Democrats and ideological liberals are more likely to support stronger financial regulatory efforts. See Broz (2013) and Keller and Kelly (2015).

4 These findings hold cross-nationally. In a survey of 20 industrial economies, Scheve (2004) finds a positive association between political conservatism and inflation aversion. Richer citizens, moreover were more likely to cite tackling inflation as a policy priority relative to poorer citizens.

5 Monetary "hawks" are relatively averse to inflation. Hawks prefer "tight," or contractionary, monetary policy via higher interest rates. In contrast, monetary "doves" are less averse to inflation and prefer trading off higher inflation for lower unemployment.

This heterogeneity across the political space can in part be explained by monetary policy's distributional consequences (Hibbs 1987; Alesina and Rosenthal 1995; Scheve 2004), the source of which is assumed to be the implicit tradeoff between unemployment and inflation as represented by the Phillips curve.[6]. Higher-than-anticipated inflation redistributes wealth from creditors to debtors, punishing savers while rewarding borrowers. Inflation may also erode the wealth of individuals earning fixed-incomes, such as pensioners. The wealthy and elderly–key constituents of the Republican Party—will thus support a low inflation/high interest rate position.

Among central bankers, professional backgrounds are also found to be strong predictors of monetary policy preferences. In particular, policymakers with doctorates in Economics or career experience in finance have more intense and consistent anti-inflationary preferences than central bankers who hail from government careers (Havrilesky and Gildea 1995; Adolph 2013).The financial sector's monetary conservatism is traced to its fundamental vulnerability to both unanticipated and anticipated inflation (Epstein and Schor 1990; Posen 1995; Weise 2008).[7] While some sophisticated financial sector activities, such as foreign exchange trading and money market fund investments, may benefit from higher and more volatile prices, the industry overall has elevated price stability to top of its agenda, a priority reflected in its lobbying activities (Weise 2008). Posen (1995) argues that the very foundation of the Federal Reserve's independence is located in the size and organizational strength of the financial sector, the only interest group "that is more committed to price stability than the median voter" and capable of providing the necessary political support for counterinflationary policy.

Beyond partisan and professional characteristics, variation in central bankers' monetary policy preferences may stem from regional considerations. As previous research has shown, the voting behavior of both Reserve Bank presidents and members of the Board of Governors in the FOMC may reflect greater responsiveness to the unemployment rate of the region they are affiliated with than to the national rate (Tootell 2000; Meade and Sheets 2005; Meade 2007). These observed "regional identities" suggest that central bankers may behave as delegates of regional constituencies, even if their statutory responsibilities do not prescribe them to represent a particular geographical area.

3.2 Theoretical Expectations

I propose and test several general expectations regarding Reserve Bank directors' political ideologies. First, given that the director classes are defined both by a) the appointing entity and b) the director's career background, I expect to find variation in director ideology across classes. With respect to the appointing entity, I anticipate bankers will select more politically conservative (Class A and B) directors on average relative to the Board of Governors' (Class C) selections. This hypothesis follows from expectations regarding

6 Theoretical models of macroeconomic policymaking rely on the assumption that policymakers and voters have utility functions decreasing in the rates of inflation and unemployment. Public opinion supports this claim; see Hibbs (1987) and Shiller (1997)

7 Rogoff (1985) suggests that the most reliable inflation-averse actors are most likely to be found in the financial sector.

the appointer's career background: government service has been found to be positively associated with central bankers' preference for prioritizing output stabilization over price stabilization, while individuals with careers in finance are associated with more conservative political—and, in particular, monetary—ideology. Assuming that appointers select a director at least as conservative as they are, one would expect banks to select Class A and B directors that are more inflation averse (and thus also more politically conservative) relative to the Board of Governors' selections. That the Board of Governors is composed of political appointees, moreover, gives additional reason to believe Class C directors will be less conservative than other directors. Because the Board of Governors is composed of both Democratic and Republican appointees in most years, their selections are likely to be more ideologically diverse and, on average, moderate. In other words, the partisan politics inherent in the Board of Governors is likely be reflected in the appointment of Class C directors. Who holds the majority on the Board of Governors should also be of relevance: when Democrat appointees hold a majority on the Board of Governors, their Class C picks should be less conservative than when Republican appointees hold a majority.

With respect to directors' career backgrounds, I expect Class A directors to be more conservative than Class B directors, even though they are appointed by the same entities. As the only director class permitted to seat bankers—as well as to represent bankers', rather than the public's, interests—electing banks have a clear incentive to seat one of their own as a Class A director; indeed, bankers have traditionally been the only ones to fill these seats. As described above, bankers are anticipated to be more inflation averse and thus will have ideal points further right on the spectrum. Because all Class A directors are likely to be bankers, I expect they will be more conservative, and more uniformly so, relative to Class B (and Class C) directors. That Class B directors are prohibited from being bankers allows for a more occupationally diverse set of directors, presumably some of whom hail from industries that are less conservative than banking with respect to monetary and regulatory policy. Class B directors may thus exhibit more varied, and slightly more moderate, political ideologies relative to their Class A counterparts.

H1: Directors with careers in banking (Class A directors) will be more politically conservative than their non-banker counterparts.

H2: Directors appointed by bankers (Class A and Class B directors) will be more conservative than directors appointed by the Board of Governors (Class C directors).

H3: Class C directors appointed by a Board of Governors in which Democratic-appointees compose a majority of governors are less conservative than Class C directors appointed by a Board of Governors composed of majority-Republican appointees.

I further expect to find heterogeneity in director political ideologies across Reserve districts. Specifically, I suspect that Reserve Banks headquartered in relatively liberal areas will have less conservative directorates relative to Reserve Banks headquartered in more politically conservative areas. This hypothesis relies on a very simple assumption: because directors must be residents of the Reserve districts, the pool of potential directors across districts will vary with the political character of the region. The Boston Fed, for example, which spans New England, likely has a larger pool of liberals from which it selects directors compared to the Kansas City Fed. Simply as a matter of selection, then, more politically liberal districts should have more politically liberal directors. This hypothesis is not intended to capture the formal process by which directors are selected—this is explored in the next chapter—but instead merely describes an intuitive relationship that I expect to see in the data.

While I expect this hypothesis to hold overall, I single out the New York Fed as a potential contrary case. Of all the Reserve Banks, New York—which is charged with executing the FOMC's interest rate policy through open market operations and regulates the vast majority of "too-big-to-fail" financial institutions—is well-known for its intimacy with and operational dependence on the financial sector. Indeed, Fed reformers of both political parties have pointed to the New York Fed as a prime example of agency capture by financial interests. For this reason, one might expect the New York Fed to have a relatively conservative board of directors—at least with respect to monetary and regulatory policy—in spite of its "liberal" locale.

H4(a): Reserve Banks headquartered in politically conservative areas will be governed by more conservative directorates.

H4(b): The directorates of the New York Fed will be among the most conservative despite the relatively liberal political environment in which it is headquartered.

It is worth emphasizing that I do not assume bankers or the Board of Governors select directors on the basis of political ideology. In most cases this information is unobserved to the appointers, and even if observed institutional norms against inviting "politics" into the Fed likely discourages explicit selection on this basis. Instead, given that the director classes are defined primarily by the employment and financial interests of individuals—bankers may generally only serve as Class A directors, only individuals without stockholding interests in regulated financial institutions may serve as Class C directors, and so on—I expect banks and the Board of Governors will select directors on the basis of professional characteristics. As discussed in the previous section, professional characteristics are often correlated with political ideology. Any observed ideological sorting among directors across classes or Reserve districts, then, is assumed to reflect the underlying characteristics of the individuals (for example: bankers likely have similar professional characteristics and are also likely to serve as Class A directors).

At the same time, it is worth noting the history of more "overt" politics circling this domain. Archival records suggest the partisan composition of the boards was a point of contention over which the business community lobbied the government in the Fed's early years. In one example, a representative of the Republican National Committee from Missouri sent a letter to Treasury Secretary Andrew Mellon in 1929 complaining about Democrats' dominance in the St. Louis Fed and asking Mellon to "exert an influence" to ensure that the next Class C director was a Republican. Doing so would ensure "the Republicans of this Reserve District can feel they are not being ignored" (see Appendix 3.7.1). In another example from 1924, a Class A director of the Kansas City Fed wrote an op-ed in a local newspaper claiming "there isn't a Democrat on any Federal Reserve Bank board in the United States to-day"[8]. In internal communications, the Board of Governors replied that some Reserve Banks had no Republicans on staff and thus they could not be accused of favoring Republicans. Similarly, Congressman Campbell Slemp (R-VA) wrote a letter to an acquaintance at the Treasury in 1922 claiming he had heard that not one of the Richmond Fed's 500 employees were Republican. The letter was forwarded to the governor (president) of the Richmond Fed, who replied that the claim was likely inaccurate but "we have no record of the politics of any of our officers or employees." The president goes on to infer partisanship from employees' race: "There are forty-four colored people in the bank, third-two of whom are males. While I know nothing about it, it is more than likely that some, or most, of these colored employees belong to the Republican party." He also defends the Bank against partisan bias by arguing that the predominance of Democrats, if true, merely reflected the fact that the Richmond district was majority Democrat.

3.3 Data

3.3.1 Identifying Reserve Bank Directors

I examine all individuals who served on the Reserve Bank boards of directors between 1975 and 2015, roughly 4,400 director-year panel observations.[9] Directors (n=995) were identified through the Annual Reports of the Federal Reserve Board of Governors. Directors' Reserve Bank, class, employer, and employer location were also recorded from the Annual Reports.[10] Additional biographical information, including birth year, education, employment history, interest group affiliations, and political activity, was collected from public sources and BoardEx's database of corporate professionals. I supplement this data with demographic and economic data for each directors' county of residence.

Table 3.1 provides a summary of select Reserve Bank director attributes broken out by director class and Reserve district. There is considerable variation in director characteristics across both dimensions. Directors serve for an average of 4.75 years, with Class C directors serving more than a year longer than Class A directors on average. Director turnover is highest among the Richmond and Minneapolis boards and lowest in Dallas and St. Louis. Roughly 13% of directors in the sample are women; they are over three times more likely to serve as Class B or Class C directors than as Class A.[11] Women held

8 National Archives and Records Administration (Group 82, Box 854)

9 Beginning the analysis in 1975 is rooted in both practical and substantive concerns. As a practical matter, donation records and digitized Fed documents are incomplete prior to the late 1970s. Substantively, the onset of the "Volcker Revolution" in 1979—when Fed Chairman Paul Volcker drove interest rates to unprecedented heights in order to "tame the inflationary dragon", thereby establishing the Fed's credible commitment to low inflation—is considered a significant break in the institutional character of the Fed (Schonhardt-Bailey 2013).

10 Eighteen directors in the sample changed classes during their tenure. In all cases, the director began service as a Class B director and was subsequently appointed a Class C director to serve as chair of the board. I also identify five directors who served nonconsecutive terms on the board of directors. In all but one case the director was Class A.

11 By comparison, the share of women on the boards of Fortune 500 companies was 20% over this period

the largest share of director seats on the board of the Atlanta Fed (17%) and smallest share on the board of the Cleveland Fed (8.5%).

The majority of directors hold advanced degrees, with an MBA being the most common. In contrast to the Board of Governors and the presidents of the Reserve Banks, only a small minority of directors, 2.5%, holds a PhD in Economics; economist directors are most common at the Boston Fed. With respect to employment, academics and university administrators compose nearly 5% of the sample and are most prevalent on the New York and Dallas boards. Directors employed in banking or finance at the time of their appointment compose 41.5% of the sample. All but one Class A director serving between 1975 and 2015 was a bank employee. A small number of Class B and Class C directors were employees of non-bank financial firms—such as private equity, venture capital, and financial advisory companies—at the time of the appointment. While professional bankers on the boards of the Kansas City and Minneapolis Feds held exactly one-third of director seats, bankers or financiers held roughly one-half of director seats at the Chicago, Minneapolis, and Philadelphia Feds. While much attention has been paid to Reserve Bank presidents' ties to Goldman Sachs, only four of the 995 individuals who have served on the Reserve Bank boards in the last four decades have been employed by or sat on the board of Goldman Sachs.[12] Moreover, only one of these individuals was employed by Goldman at the time of their board appointment.

Roughly 3% of directors were employed as public sector union executives or were found to have membership in unions at some point during their professional career. Directors with organized labor affiliations were most common on the Richmond and Chicago boards, composing 6 and 5 percent of those Banks' directorates, respectively. The Atlanta Fed did not have any directors with ties to organized labor over this period. By contrast, roughly a quarter of all directors across each class have been members of at least one of the three primary business lobby organizations: Chamber of Commerce, National Federation of Independent Business, and Business Roundatable. More than half of all directors from the Atlanta Fed held membership in at least one of these groups, compared to 12% of directors of the Chicago Fed.

A small percentage (3.6%) of directors in the sample ran for electoral office, with the majority of these directors seeking office prior to their appointment to the Reserve Bank boards.[13] Roughly 60% of office-seeking directors ran in local electoral races, such as city council or county executive, compared to 25% seeking a state legislature seat and 11% seeking a federal legislative position. Herman Cain, former director of the St. Louis Fed, is the only director to have attempted a presidential run. Overall, about 90% of office-seeking directors won a race at some point in their career.

(Bonica 2016b).

[12] See, for example: Jonathan Spicer, "Warren blasts Yellen for endorsing very white, very male regional Fed presidents." Reuters. June 21, 2016.

[13] There is one director in sample who has served in elected office and on the board of a Reserve Bank concurrently, political activity that is generally prohibited by the Federal Reserve's bylaws. Exceptions are made, however, when the position held or sought is nonpartisan and not "viewed by the local public as partisan." Matthew T. Doyle served as city commissioner and mayor— two nonpartisan positions—of Texas City, TX during his service on the Dallas Fed board.

Table 3.1: Reserve Bank Director Attributes, by class and district, 1975-2015

Group	n	Median Age	Avg Tenure (yrs)	Avg No. Boards	Pct Female	Pct MBA	Pct JD	Pct PhD	Pct PhD (Econ)	Pct Banker/ Finance	Pct Farming	Pct Academia	Pct Union Exec./ Affil.	Pct Bus Group Affil.	Pct Office Run
All	995	59	4.7	2.6	12.6	21.8	11.3	8.5	2.5	41.5	1.8	4.8	2.6	26.4	3.6
Class A	388	59	4.0	1.9	4.9	24.4	5.9	1.7	0.8	99.7	0.0	0.0	0.0	26.5	3.1
Class B	323	58	5.0	2.8	17.0	20.8	12.1	10.4	2.5	5.0	5.0	5.9	3.4	28.2	3.7
Class C	284	60	5.2	3.4	18.0	19.8	16.7	14.4	4.9	3.5	0.7	10.2	5.3	24.3	4.2
Boston	91	58	4.3	2.8	12.1	23.5	3.7	13.6	6.6	50.5	0.0	7.7	2.2	20.9	3.3
New York	89	60	4.4	3.1	15.7	26.2	18.8	11.2	3.4	40.4	0.0	10.1	3.4	15.7	1.1
Philadelphia	91	60	4.3	2.6	9.9	21.1	8.5	5.6	2.2	48.4	0.0	3.3	2.2	36.3	4.4
Cleveland	82	59	4.8	3.5	8.5	29.2	6.9	5.6	0.0	36.6	0.0	4.9	2.4	19.5	0.0
Richmond	96	60	4.1	2.3	10.4	25.6	12.8	7.7	1.0	46.9	0.0	1.0	6.2	32.3	2.1
Atlanta	76	58	5.1	2.2	17.1	14.7	11.8	2.9	1.3	34.2	3.9	1.3	0.0	51.3	5.3
Chicago	75	58	5.1	2.7	12.0	32.8	11.9	11.9	5.3	40.0	2.7	4.0	5.3	12.0	1.3
St. Louis	75	59	5.2	2.5	14.7	18.8	14.5	5.8	1.3	33.3	2.7	4.0	1.3	38.7	4.0
Minneapolis	93	57	4.2	1.5	15.1	17.6	5.9	7.4	1.1	48.4	4.3	3.2	2.2	14	7.5
Kansas City	79	57	4.9	2.2	11.4	18.5	13.8	9.2	3.8	33.3	3.8	5.1	1.3	30.4	3.8
Dallas	72	60	5.3	4.2	11.1	12.1	10.6	13.6	4.2	43.1	4.2	9.7	2.8	31.9	8.3
San Francisco	76	59	5.1	2.1	13.2	18.6	17.1	7.1	0.0	38.2	1.3	3.9	1.3	17.1	2.6

Note: This table provides an overview of the educational and professional backgrounds of directors who served between 1975 and 2015. "Median Age" denotes the median age of directors at the time of their appointment to the board of directors. "Average Tenure" is computed excluding those directors currently serving. "Average Board Service" describes the number of external directorships directors have held (before, after, or during their Reserve Bank board service). "Pct Union Exec./Affil." is computed as the percent of directors who have been employed by or were a member of a public sector union. "Pct Business Group Affil.' describes the percentage of directors who were affiliated with the Chamber of Commerce, National Federal of Independent Business, or Business Roundtable (before, after, or during their Reserve Bank board service). "Pct Electoral Office/Attempt" describes the percentage of directors who have run for elected office.

3.3.2 Measuring Director Ideology

Estimates of director political ideology and data on director campaign contributions were obtained from the Database on Ideology, Money in Politics, and Elections (DIME) (Bonica 2016a). Consisting of over 100 million observations, DIME consolidates records of all FEC-reported donations to candidates, party and political committees, and other groups in local, state, and federal elections between 1979 and 2014.[14]. The data includes information on the recipient's identity and party affiliation, the size of the donation, and the donor's self-reported employer, profession, and residence. As detailed in Bonica (2014), the universe of contribution data is leveraged to estimate common-space campaign finance scores (CFscores) employing a scaling approach predicated on the assumption that contributors are likely to donate to ideologically proximate political actors. The resulting CFscores place individuals on a unidimensional liberal/conservative scale, with higher values denoting greater political conservatism. I utilize the CFscore as my variable of interest in the descriptive analyses that follow.

I linked my sample of directors to DIME using a fuzzy string matching algorithm that returns potential matches according to similarities in name, employer, and state of residence.[15] All returned matches were manually reviewed to validate the identity of the campaign contributors using biographical data, housing records, and other public sources.[16] Of the 995 directors who served between 1975 and 2015, 859 (86%) were matched to DIME and 817 (82%) were assigned CFscores (CFscores are not estimated for contributors who donated solely to corporate or trade groups).[17] Tables 3.2 and 3.3 below summarize the donor rates by director class and Reserve district. Class B and Class C directors are more likely to be matched to DIME and assigned a CFscore—and thus more likely to have donated to campaigns—than Class A directors: 77% of Class A directors in the sample donated to political campaigns between 1979 and 2014 compared to 86% and 85% of Class B and C directors. Donor rates also vary across Reserve districts. About 90% of directors from the Chicago and Dallas Fed serving between 1975 and 2015 were assigned CFscores. By comparison, the lowest donor rates were found among directors from the Philadelphia and Minneapolis Feds, where roughly 70% of directors were matched to DIME and assigned CFscores.

Upon matching directors to DIME, I used directors' unique identifiers to pull records of all campaign contributions made between the 1980 and 2014 election cycles. Reserve Bank directors matched to DIME made roughly 55,000 campaign contributions over this time period, 70% of which went to party affiliated candidates and groups (Democratic,

14 The FEC reports contributions to federal campaigns of at least $200, though DIME includes donations made to state campaigns that meet lower contribution thresholds

15 The algorithm employs a Jaro-Winkler edit distance measure of string similarity though an otherwise identical algorithm based on Levenshtein edit distance performs comparably.

16 In several cases, DIME assigns multiple identifiers to a single individual. To avoid duplicates, I selected the identification number and corresponding CFscore associated with the contribution made closest to the time period the individual served on the Reserve Bank board of directors.

17 I calibrated my algorithm to return matches that met a relatively strict maximum character distance requirement. The data is thus more likely to suffer from missing director matches rather than the inclusion of false matches. Accordingly, the donor rate for my sample may be interpreted as a conservative estimate.

Table 3.2: Reserve Bank Directors in Sample, Across Director Class

Class	Directors	Matched to DIME	Matched, assigned CFscore	Percent matched, assigned CFscore
A	388	321	299	77%
B	323	289	278	86%
C	284	249	240	85%
Total	995	859	817	82%

Note: The table shows the majority of directors in each class were matched to DIME and assigned CFscores. Column 2 lists the number of individuals who served as Reserve Bank directors between 1975 and 2015. Column 3 lists the number of directors who were matched to DIME. Column 4 lists the number of directors who were assigned a CFscore in DIME. Column 5 provides the share of directors in each class who were matched to DIME and assigned a CFscore.

Table 3.3: Reserve Bank Directors in Sample, Across Reserve Bank

Bank	Directors	Matched to DIME	Matched, assigned CFscore	Percent matched, assigned CFscore
Boston	91	80	77	85%
New York	89	79	75	84%
Philadelphia	91	72	65	71%
Cleveland	82	73	71	87%
Richmond	96	88	81	84%
Atlanta	76	68	64	84%
Chicago	75	69	68	91%
St. Louis	75	60	55	73%
Minneapolis	93	70	66	71%
Kansas City	79	67	65	82%
Dallas	72	67	65	90%
San Fran	76	66	65	86%
Total	995	859	817	82%

Note: The table shows the majority of directors in each district were matched to DIME and assigned CFscores. Column 2 lists the number of individuals who served as Reserve Bank directors between 1975 and 2015. Column 3 lists the number of directors matched to DIME. Column 4 lists the number of directors who were assigned a CFscore in DIME. Column 5 provides the share of directors in each district who were matched to DIME and assigned a CFscore.

Republican, and Independent). The average director made 67 contributions and the mean donation amount was $1,400. Roughly half of all director contributions went to Senate and House races. Directors were most likely to contribute to partisan incumbents over challengers—56% of partisan donations compared to 17% for challengers—and to donate to campaign winners (55% of all partisan contributions). See Appendix 3.7.4 for a summary of director contributions broken down by class and Reserve Bank.

3.3.3 Drawbacks to DIME

A critical advantage of DIME is that it provides a validated measure of political ideology for individuals whose political leanings or policy preferences are unobservable or systematically incomparable across groups, time and policy issues. This has enabled scholars to study a host of political actors for whom popular measures of ideology or preference, such as interest group ratings or ideal points estimated according to spatial voting models, are unavailable. To date, CFscores have been used to investigate the political ideologies of doctors (Bonica, Rosenthal, and Rothman 2014), Fortune 500 executives (Bonica 2016b), and lawyers, law clerks, and judges (Bonica and Sen 2017; Bonica, Chilton, and Sen 2016; Bonica et al. 2017). Given that Reserve Bank directors are private citizens whose policymaking activity is largely unobserved—directors' individual votes on the discount rate, for example, are confidential, as are the transcripts of meetings of the boards of directors—the methods used to estimate the policy preferences and political ideologies of other political elites, including Reserve Bank presidents and the Board of Governors (see, for example, Chang 2003; Chappell, McGregor, and Vermilyea 2005; McCracken 2010; Meade 2010), are generally inapplicable. DIME thus offers a valuable opportunity to identify and compare the estimated ideological positions of political actors that operate relatively opaquely.

As several studies have noted, however, there are significant limitations to DIME in particular and ideological scaling measures more generally (Broockman 2016; Hill and Huber 2017; Tausanovitch and Warshaw 2017) . One common concern regarding campaign contribution data is that contributions may reflect strategic considerations, such as the desire to hedge bets or choose winners, rather than an honest revelation of ideological preference. While it is conceivable that Reserve Bank directors—whether before, after, or during their tenure on the board—made such strategic donations, previous work finds little evidence of this behavior, neither among the whole donorate (Bonica 2014) or among specific subgroups (Bonica, Chilton, and Sen 2016). In particular, Bonica (2016b) finds no evidence of strategic giving among the population of Fortune 500 directors, a population that closely resembles the Reserve Bank boards. Among directors in my sample who made multiple contributions to partisan candidates, just 5% split their donations between parties roughly 50-50 (in the 46% to 54% range). By comparison, about 40% made all donations to candidates from a single party. Moreover, because few Reserve Bank directors—less than 4% of my sample—go on to pursue political office or serve in government, it seems less likely that a significant number of directors would have incentive to contribute strategically as a means of advancing their professional ambitions or obtaining political favor from particular candidates.

A second limitation concerns the interpretation of CFscores. As Hill and Huber (2017) show, CFscores are only weakly correlated with other measures of individual-level policy ideology when looking within parties. In other words, while CFscores may be reliable predictors of an individual's partisan identification, they are less reliable estimates of policy preferences. As described in the previous section, however, monetary policy preferences are strongly and durably correlated with partisan identity, and the latent dove-hawk monetary ideology dimension itself is strongly correlated with the liberal-conservative political dimension.[18] In the case of monetary policy in particular, then, it may reasonable to interpret CFscores as a proxy for policy preference, though I follow other researchers' caution with respect to reaching this conclusion. For this analysis, I interpret CFscores as a meaningful proxy for directors' partisan leanings and, at most, a suggestive signal of their economic policy preferences.

A more serious problem for this analysis may result from selection into the sample. Because individuals will only appear in DIME if they contributed to a political campaign or committee, any analysis of Reserve Bank director ideology may be biased to the extent that a director's CFscore is correlated with their likelihood of donating. Contributors, in other words, may differ on a variety of characteristics from non-contributors. Hill and Huber (2017), for example, find that donors tend to be wealthier, older, more educated, less religious, less racially diverse, and more ideologically extreme than non-voters.

The extremely high donor rate in my sample gives some reason to believe that selection bias is perhaps less threatening to this analysis relative to other contexts, however. Of the 995 directors in the sample, 86% were matched to DIME. This is comparable to the 83 percent giving rate observed among Fortune 500 executives and directors (Bonica 2016b) and significantly higher than the rate observed among other groups, including 68% of Obama Administration bureaucratic appointees (Bonica, Chen, and Johnson 2015), 43% of lawyers (Bonica, Chilton, and Sen 2016), and 9% of physicians (Bonica, Rosenthal, and Rothman 2014). The Reserve Bank director donor rate also dwarfs the share of donors among the voting-age population between 1980 and 2014, which averaged less than 2 percent across this period. In short, the vast majority of Reserve Bank directors donated to a political campaign or committee at least once; 60% of the sample donated at least 20 times over the 40-year period. Among the directors who were not matched to the contribution data, moreover, a disproportionate number had terms that expired before 1980. Given that the DIME data does not begin until 1980, some of the directors appear to be unmatched because they died prior to, or soon after, the 1980 election cycle. The remaining unmatched directors are distributed relatively equally across time and Reserve Banks, though nearly half of the unmatched directors are Class A (see Appendix 3.7.2).

Nevertheless, I try to address potential selection bias in my regression analysis in Section 3.5 with a two-stage Heckman selection model. The Heckman model allows for cor-

[18] The durability of partisanship allays an additional concern regarding time invariance. CFscores are static measures and thus do not allow observation of potential changes in contributor ideology over time. While there is ample evidence of partisanship stability over adulthood, I interrogate this issue more thoroughly by examining the donation behavior of directors who donated to at least 8 distinct Democratic or Republican party candidates both before and after their Reserve Bank board service (n=288). Directors contribute to ideologically similar political candidates before and after their board service (corr=0.8). A t-test of differences between pre- and post-service candidate CFscores is not significant (p-value=0.4).

rection of biased parameter estimates by accounting for the likelihood that an individual selects into the sample. In the first-stage equation, I estimate a probit model in which the dependent variable is a dummy indicating whether a director was matched to DIME. On the right hand side, I include variables that are likely correlated with a director's decision to donate, such as their gender, education, profession, and geographic location. Following Bonica and Sen (2015), I include a variable in the selection equation that measures the number of elected executive positions in each director's state of residence. This variable serves as an instrument to aid with identification of the selection model.[19] A correction factor computed from the first-stage probit model is then included in the second-stage equation, which models the effect of directors' attributes on their ideology scores. I report the results from the first-stage model in Appendix 3.7.3. The second-stage results are discussed in Section 3.5.

3.4 Descriptive Results

For the following analyses, I subset the sample to directors who made campaign contributions to at least eight distinct candidates or committees between 1975 and 2015 (n=475). CFscores are estimated most reliably for contributors with about eight distinct donations (Bonica 2016a) and I adopt this cutoff with the aim of presenting a conservative analysis.[20]

3.4.1 The Political Ideologies of Reserve Bank Directors

To begin, I examine the overall distribution of Reserve Bank director ideologies. Figure 3.1 displays a density curve of CFscores of all directors in the subsetted sample with the ideal points of prominent party figures demarcated along the horizontal axis for reference. Note that the DIME data is not complete for the 2016 election cycle, so the ideal point of Donald Trump is computed from his position as a campaign *contributor*, rather than candidate, through the 2014 election cycle.[21] The distribution is right-leaning though bimodal, with liberal Reserve Bank directors centered around a CFscore of -0.70 on the left side of

[19] As discussed in Bonica and Sen (2015), the number of elected state executives (e.g. governor, attorney general, secretary of state, etc.) is likely affects a director's propensity to donate—if you live in a state with more elected state executives, there will be more electoral races to which you may donate—but *not* their ideology score. Similar to Bonica and Sen's application, the state electeds instrument is correlated—though, weakly–with whether a director is matched to DIME (corr=0.11) but not correlated with a director's CFscore (corr=0.06).

[20] For robustness, I also ran the analysis using the full sample of directors with CFscores (n=817), directors who made contributions to at least 25 distinct recipients, directors who exclusively contributed to presidential candidates, directors who exclusively contributed prior to serving on the Reserve Bank boards, directors who made at least 50 total contributions, and utilizing a binary measure of ideology based on whether the director's CFscore falls below or above zero. The basic patterns are consistent across all subsamples, though I detect statistically significant differences in director ideology between more Reserve districts and director classes when using larger samples, likely due to greater statistical power. Despite the more significant differences I uncover using the larger sample, I analyze the smaller sample here as a means of establishing a lower bound on observed trends.

[21] Trump's CFscore for 2016 is undoubtedly much higher, given his support among ideologically conservative individuals and groups during the presidential election.

the spectrum—roughly the same position as the current Senate Minority Leader, Chuck Schumer (D-NY, CFscore= -0.68)—and a greater density of directors centered around a CFscore of 0.9 on the right side, to the right of Senate Majority Leader Mitch McConnell (R-KY, CFscore=0.7). Ideological "extremists" are clustered on the right side of the scale. No Reserve Bank director over this time period was as liberal as Senator Bernie Sanders (D-VT, CFscore= -1.73) or Senator Elizabeth Warren (D-MA, CFscore= -1.57), though several directors have been more conservative than the most conservative sitting senator, Ted Cruz (R-TX, CFscore=1.30), and also more conservative than recently retired senators and well-known Fed foes Ron Paul (CFscore=1.487) and Rand Paul (CFscore=1.39).

The mean CFscore, denoted by the dashed gray line, is 0.33, and the median CFscore, denoted by the solid gray line, is 0.57. Relative to the mean (CFscore= -0.05) and median (CFscore=0.07) of all individual donors in DIME, Reserve Bank director donors are significantly more conservative.[22] In the terms of the current Congress, the ideologies of the mean and median Reserve Bank directors approximate the ideological positions of the "moderate" wing of Republicans in the Senate, falling between the ideal points of Olympia Snowe (R-ME, CFscore=0.28) and Lisa Murkowski (R-AK, CFscore=0.58). Directors' relative conservatism is reflected in their share of donations going to Republican candidates or committees: 64% of all directors' partisan contributions went to the GOP; in presidential races; 70% of all directors' contributions went to Republican candidates.

To provide further context, Figure 3.2 compares Reserve Bank directors against two theoretically similar populations: FOMC members and Fortune 500 directors. For the FOMC, roughly 75% of Federal Reserve governors and 42% of Reserve Bank presidents who served between 1975 and 2015 were matched to DIME and assigned a CFscore. While these samples are small, they nonetheless suggest ideological differences when compared with Reserve Bank directors. The distribution of directors is more right-leaning, and thus more conservative, than the distribution of FOMC members, as confirmed by a two-sample K-S test (D=0.21, p=0.02).[23] This difference is driven primarily by governors, however: the mean and median CFscores of governors (-0.18 and -0.09, respectively) are significantly less conservative than that of directors. The distribution of Federal Reserve governors over this period is clearly bimodal, reflecting the even split of governors' partisan affiliations in the sample (half were appointed by Democratic administrations and half were appointed by Republicans). In contrast, the distribution of Reserve Bank president ideology looks similar to the ideological distribution of Reserve Bank directors. The mean Reserve Bank president in the sample (CFscore=0.28) is only slightly less conservative than the mean Reserve Bank director. K-S tests confirm that governors are significantly less conservative than directors (p=0.002) while observed differences between president and director ideologies are not statistically significant (p=0.7)[24]. These results

[22] Directors are also more conservative than the population of donors residing within the congressional districts represented by candidates that received donations from directors (mean CFscore=0.2, median CFscore=0.26).

[23] A t-test of the difference in means between the ideologies and directors and governors yields the same conclusion (p=0.02). I report K-S test results, however, simply because K-S tests require fewer assumptions about the underlying distribution of my data.

[24] I use a Holm adjustment, which controls for Type I errors induced from making multiple comparisons, to adjust p-values.

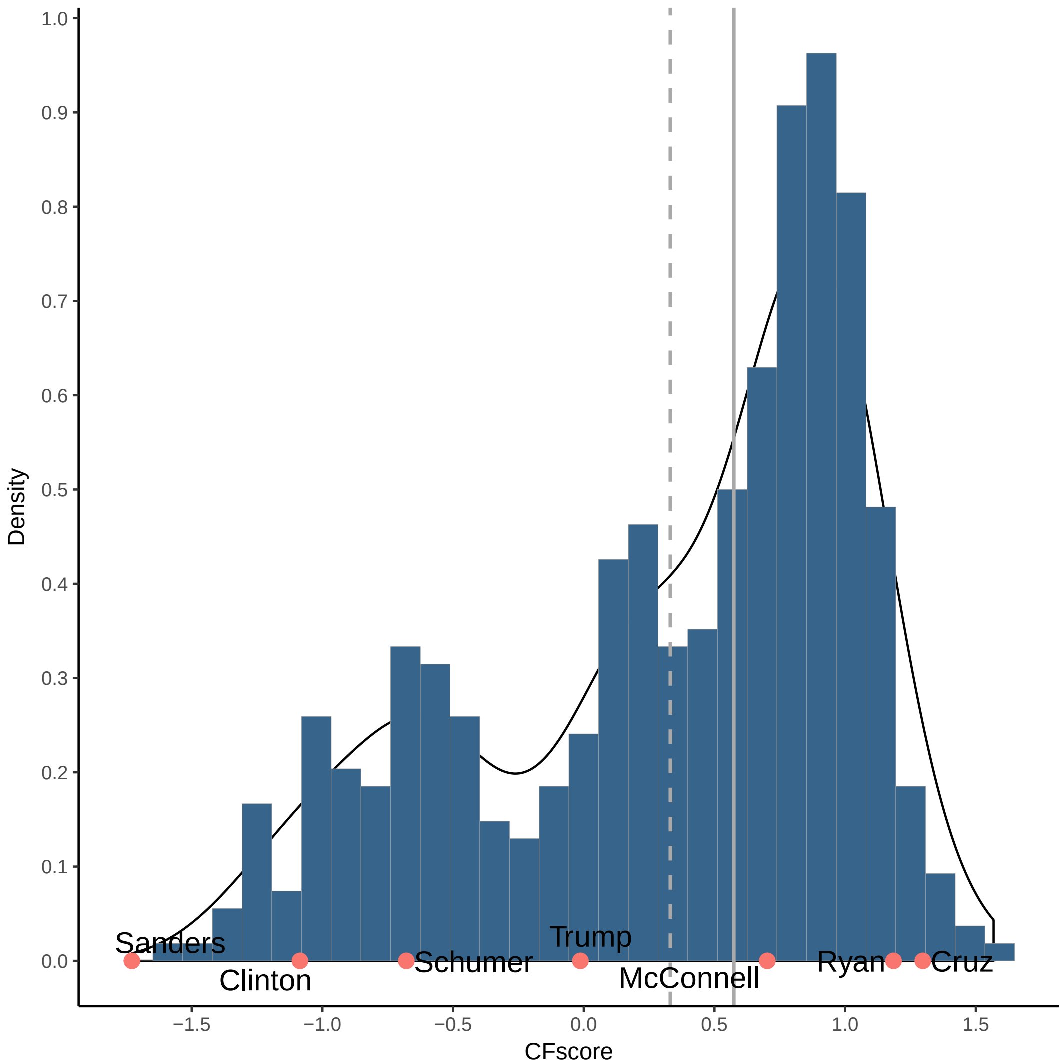
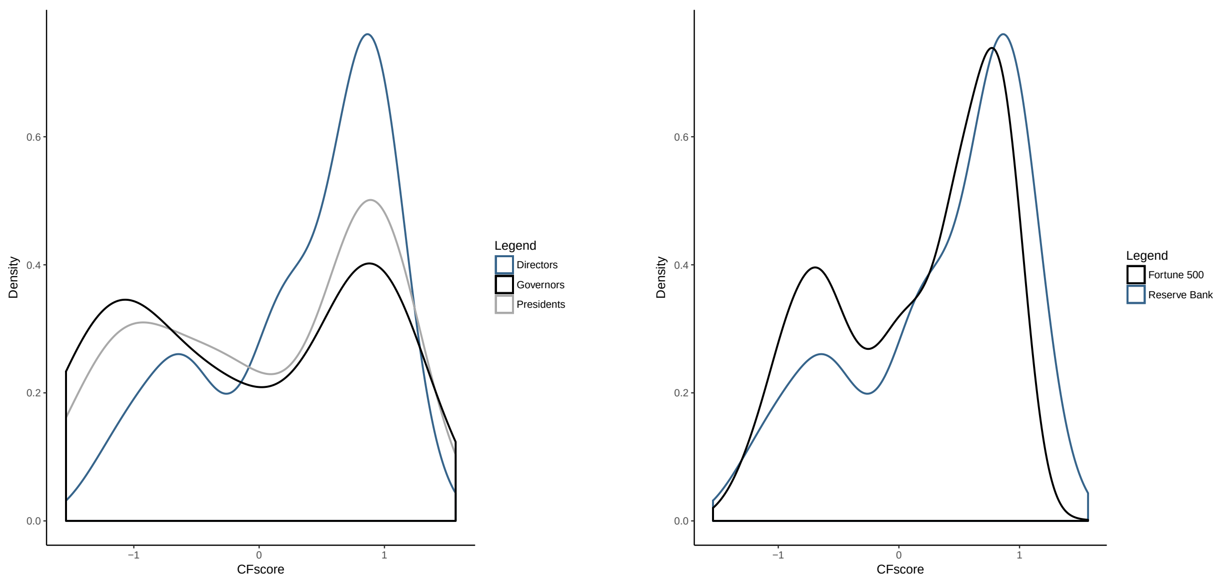


Figure 3.1: Distribution of Reserve Bank Director CFscores. The dashed gray line denotes the mean and the solid gray line denotes the median. The ideal points of prominent politicians are provided along the x-axis; note that unlike the other politicians listed, the ideal point of Donald Trump is computed from his history of campaign contributions, rather than as a recipient of contributions as a candidate for office (the DIME data includes records through the 2014 election cycle). The distribution of director CFscores leans to the right, suggesting a greater density of politically conservative directors.

are consistent with theories of political appointments that presume agents appoint directors that are ideologically similar. Governors of the Federal Reserve Board are Senate-confirmed presidential appointees and as a consequence the governor population should represent both ends of the ideological spectrum. This is reflected neatly in the bimodality of the distribution of governor ideologies and in the "moderate" (i.e. near zero) mean CFscore. Reserve Bank presidents are selected by Reserve Bank directors; that their ideological distribution and mean donor mirror that of directors is unsurprising. In fact, it suggests a simple explanation for why we observe Reserve Bank presidents with conservative voting records in the FOMC (see, for example, Woolley 1984; Chappell, Havrilesky and McGregor 1993; Meade and Sheets 2005): the individuals who appoint them are conservative as well.



(a) FOMC Ideology

(b) Fortune 500 Ideology

Figure 3.2: Ideological Distributions of Reserve Bank Directors vs. FOMC Members and Fortune 500 Directors. Directors are on average more conservative than governors of the Federal Reserve Board and directors of Fortune 500 companies.

Turning to the Fortune 500, Figure 3b plots the distribution of Reserve Bank director ideologies against the directors of Fortune 500 companies as identified by Bonica (2016).[25] The shapes of the distributions share a resemblance, a result that may be explained in part by the overlap between the two samples: roughly 10% of directors in my sample are found in Bonica's sample.[26] Reserve Bank directors are more conservative than Fortune 500 directors and executives, however. The mean and median ideologies among

25 Bonica (2016) analyzes the ideologies of both the directors and executives of the Fortune 500. I focus solely on the Fortune 500 directors and, following his analysis, subset the sample of Fortune 500 directors to those who made more than 25 total (not necessarily distinct) contributions.

26 The overlap increases to 13% when considering Reserve Bank directors who were CEOs or Chairmen or Fortune 500 companies.

Reserve Bank directors are about twice as large as the mean (CFscore=0.13) and median ideologies (CFscore=0.31) among the Fortune 500. A K-S test confirms the distributional differences between the two groups (D=0.16, p¡0.01). Even when looking only at Class C directors, those most likely to serve on Fortune 500 boards—16% of Class C directors in my sample have served as Fortune 500 directors—there are significant distributional differences (D=0.14, p¡0.01). Overall, like Reserve Bank directors, Fortune 500 directors are on average "moderately" conservative relative the average campaign donor in the population. They are less conservative as a group, however, than the directors that oversee the Reserve Banks.

As a final inquiry into the overall distribution of director ideologies, Figure 3.3 plots the mean and median ideal point for each cohort of directors serving each year between 1975 and 2015. That is, each point takes the average (and median) CFscore of all Reserve Banks directors serving in a given year.[27] I use the panel data—each row denoting a director-year observation—and subset it to include only those directors with CFscores estimated from at least eight distinct campaign contributions (n=2,272). The gray shaded bars in the figure denote years in which Democratic appointees composed a majority on the Board of Governors. As the figure shows, director cohorts have become less conservative over time. The most conservative boards in this time period served at the end of the Carter Administration and the beginning of the Reagan presidency. From these peaks director cohorts have generally become less conservative, with the average cohort CFscore falling close to zero during the Obama Administration. Indeed, the boards serving during the 2008-2015 period were the least conservative in the sample. The decline in director ideology over time is reflected in the selection of less conservative directors over time: between 1980 and 2015, the average ideology of newly appointed directors—those directors serving their first year on the board—declined steadily (see Appendix 3.7.5).

[27] At most 108 directors—nine directors at each of the 12 Reserve Banks—serve each year.

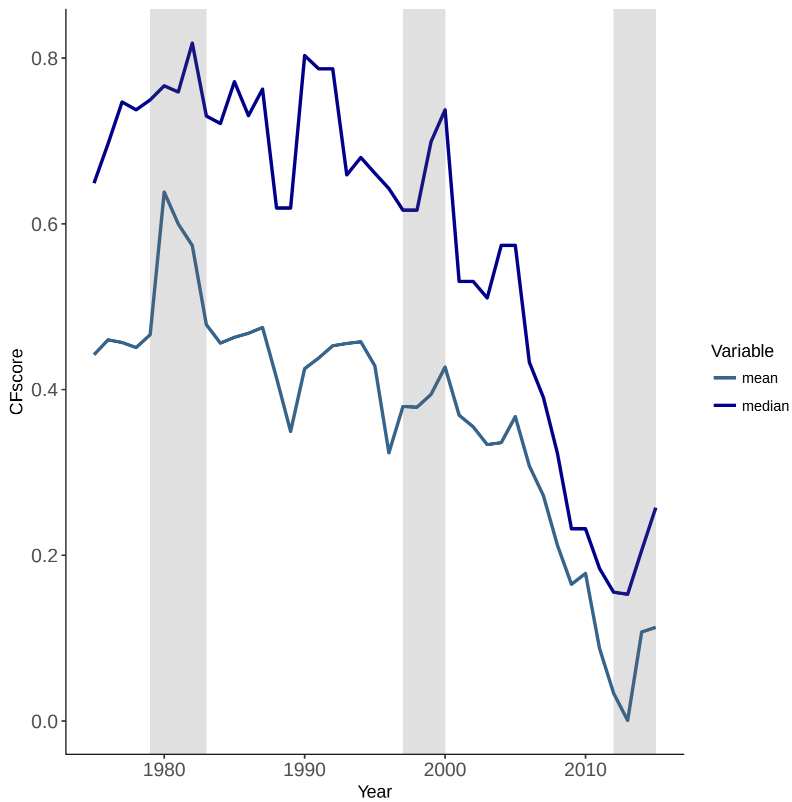


Figure 3.3: Mean and Median Director CFscore, 1975-2015. The gray bars denote years in which Democratic appointees composed a majority on the Federal Reserve Board of Governors. Directors have become less conservative over time.

One concern is that the small number of directors with CFscores in the 1970s and early 1980s is biasing the mean ideology upward and exaggerating the decline in cohort CFscores over time. The average number of directors in the sample each year is 56. In the first decade of my sample, n is smaller—about 35 directors/annually, or half the average annual sample of directors serving in the 2000s. The magnitude of the decline persists, however, after truncating the sample to exclude directors serving before 1990. The average cohort CFscore fell by 73% (.31 point) between 1990 and 2015, only slightly smaller than the 75% decline (0.33 point) observed between 1975 and 2015. Alternatively, the decline in director CFscores may simply be an artifact of the CFscore estimation procedure, reflecting a secular decline in all estimated ideal points over this time period. While I find some evidence of this when examining the ideology of all political candidates receiving campaign contributions, the decline is more muted than the one observed for Reserve Bank directors: the average CFscore of candidates declined by 0.08 points (44%) between the 1980 and 2014 electoral cycles. Using dynamic CFscore measures, which are estimated separately for political candidates for each electoral cycle, the decline is .11 points (50%). Thus despite finding evidence of a decline in average ideal points for political candidates, the ideal points of Reserve Bank directors appear to have fallen more dramatically over the last four decades.

I do not find a relationship between director ideology and the partisan makeup of the Board of Governors. As Table 3.4 shows, regressing director CFscores on a binary indicator for Democratic-majority Boards of Governors produces a negative coefficient on the dummy variable but it is not statistically significant.[28] This is true when running the analysis with only Class C directors, who are appointed directly by the Board of Governors.[29] While this is a very simple test of the hypothesis and the within-year sample sizes are fairly small, the failure to uncover a relationship between the partisan affiliation of the Board of Governors and the ideology of Class C directors may suggest that governors do not view the selection of Reserve Bank directors with a partisan lens. As I discuss in greater detail below, Class C directors are still relatively conservative when compared to the modal donor in the U.S and a vast majority (72%) come from business. Thus while governors' voting behavior and speech in the FOMC may be shaped by their political ideology as established in the literature, ideological or partisan decisionmaking may not extend to governors' other responsibilities, such as appointing Reserve Bank directors. Moreover, anecdotal accounts suggest Class C directors appointments are handled by a specific division in the Federal Reserve—the Reserve Bank Operations and Payments Systems ("RBOPS")—along with a subset of governors sitting on the Federal Reserve Board's Committee on Reserve Bank Affairs. If governor partisanship or political ideology is in fact related to the ideology of Class C directors, one may have to look at the partisan composition of the Committee on Reserve Bank Affairs or the identity of the RBOPS Division leader rather than the whole Board. In short, more information on the process by which the Board of Governors makes it Class C director appointments would aid both the interpretation and formulation of theoretical expectations regarding the relationship between the ideology of the Board of Governors and the ideology of the agents they select to oversee the Reserve Banks.

3.4.2 Variation in Director Ideology, Across Class

Figure 3.4 displays the density curves of director CFscores stratified by class. The gray dashed and solid lines denote the CFscores of the mean and median directors, respectively. Each distribution is right leaning, with the greatest density of conservative donors in the Class A distribution. The ideological distribution of Class C directors is more clearly bimodal, with greater density to the left of the scale relative to the other classes.

To more clearly assess differences across class, I plot the mean ideology of each director class in Figure 3.5. Error bars denote 95% confidence intervals. The figure appears

[28] I lag the indicator forward since new directors appointed to serve in year t are selected late in the previous year, t-1. For example, if the Board of Governors became Democratic majority at the start of 2000, their selections for Class C directors would not begin service until the start of 2001. This of course ignores mid-year director appointments due to resignation or deaths, though these compose a minority of the sample.

[29] I also do not find a relationship when running the analysis with the sample of Class C *newcomers*, i.e. Class C directors serving their first year. Statistical power may be especially problematic here given the small sample size: of the 134 Class C "newcomers," just one-fifth were selected by Democratic-majority governors. Overall, Democratic-appointee governors held a majority on the Board of Governors for about a third of the 40-year-period (13 years).

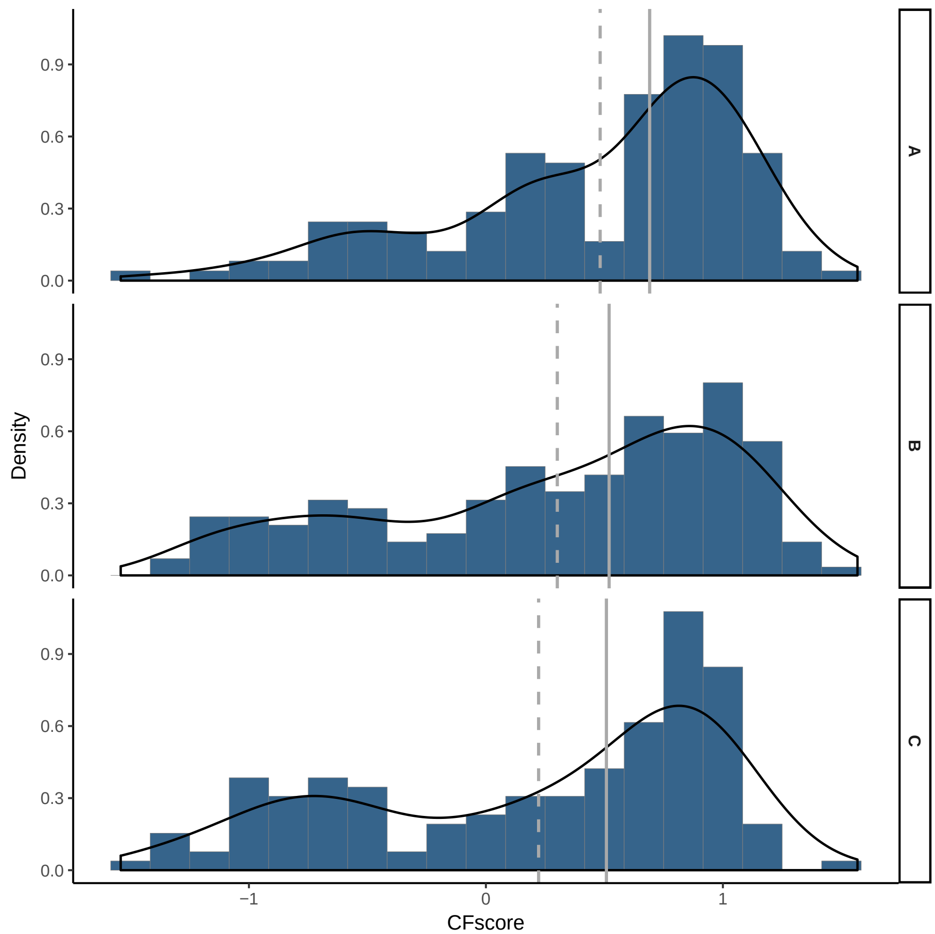


Figure 3.4: Distribution of Reserve Bank Directors CFscores, by Class. The gray dashed line denotes the mean and the gray solid line denotes the median. Class A has the greatest density of directors on the right side of the ideological spectrum, while Class C has the least. The distributions become increasingly bimodal as one moves from Class A to to Class C.

Table 3.4: Relationship Between Director Ideology and Board of Governors' Partisanship

	Dependent variable:
	CFscore
DemMajority	−0.01
	(0.04)
Constant	0.35***
	(0.02)
Observations	2,272
R^2	0.0001
Adjusted R^2	−0.0004
Residual Std. Error	0.72 (df = 2270)
F Statistic	0.16 (df = 1; 2270)
Note:	*p<0.05; **p<0.01; ***p<0.001

consistent with the hypotheses laid out in Section 3.2: Class A directors (bankers) are more conservative than their non-banker Class B and Class C colleagues. Class B directors also appear to be more conservative on average than Class C directors, the only individuals not selected by bankers, though this difference is not statistically significant. For context, the mean CFscore of Class A directors (0.48) falls to the right of Senator Susan Collins' (R-ME, CFscore=0.44). The ideal points of the average Class B (0.30) and Class C (0.22) directors fall to both sides of Collins' colleague Senator Olympia Snowe (0.28). Summary statistics for the class means are reported in Appendix 3.7.7.

Distinctions between the director classes are also visible in their contribution behavior. More than 70% of Class A directors' partisan contributions between 1980 and 2014 were given to Republican candidates and committees, compared to 61% and 63% of Class B and C directors' contributions, respectively.[30] Though Class A directors were more likely to donate to Republican affiliates relative to the other classes, they are less active and less generous contributors. Class A directors made about 33 contributions per individual, with an average donation of $926, compared to 53 contributions (average donation=$1,458) for Class B directors and 66 contributions (average donation=$1,654) for Class C directors.

The across-class analysis underscores Class A directors' distinctiveness. Particularly when compared to Class C directors, but also with respect to their fellow banker-appointed Class B colleagues, Class A directors appear to be more conservative on average, reflecting the greater number of conservative-leaning directors in their ranks. These results suggest that Class A directors' relative conservatism is likely explained by the fact that all

30 For the entire donor population over this period, about 53% of FEC-reported contributions were to Republican candidates or committee.

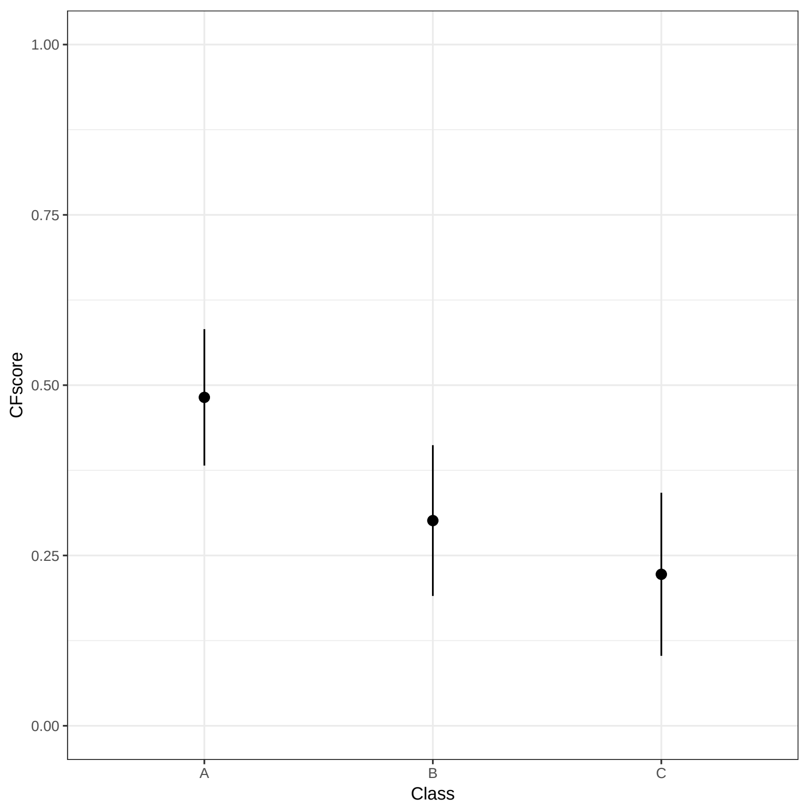


Figure 3.5: Mean Director Ideology, by Class. The error bars denote 95% confidence intervals. Class A directors are more conservative than Class B and Class C directors.

Class A directors share the same profession—and one generally prohibited among Class B and C directors: banking. Banks, when allowed to elect one of their own to sit on the Reserve Bank board, select individuals that happen to be more politically conservative relative to those they elect when they are prohibited from appointing a banker. Interestingly, the ideological similarity between Class B and Class C directors suggests that the participation of the Board of Governors in the Reserve Bank director appointment process may not necessarily engender greater ideological diversity among the Reserve Bank boards—a key objective, at least as it relates to economic policy, motivating the Federal Reserve founders' bifurcation of appointment power between private banks and the Board of Governors.

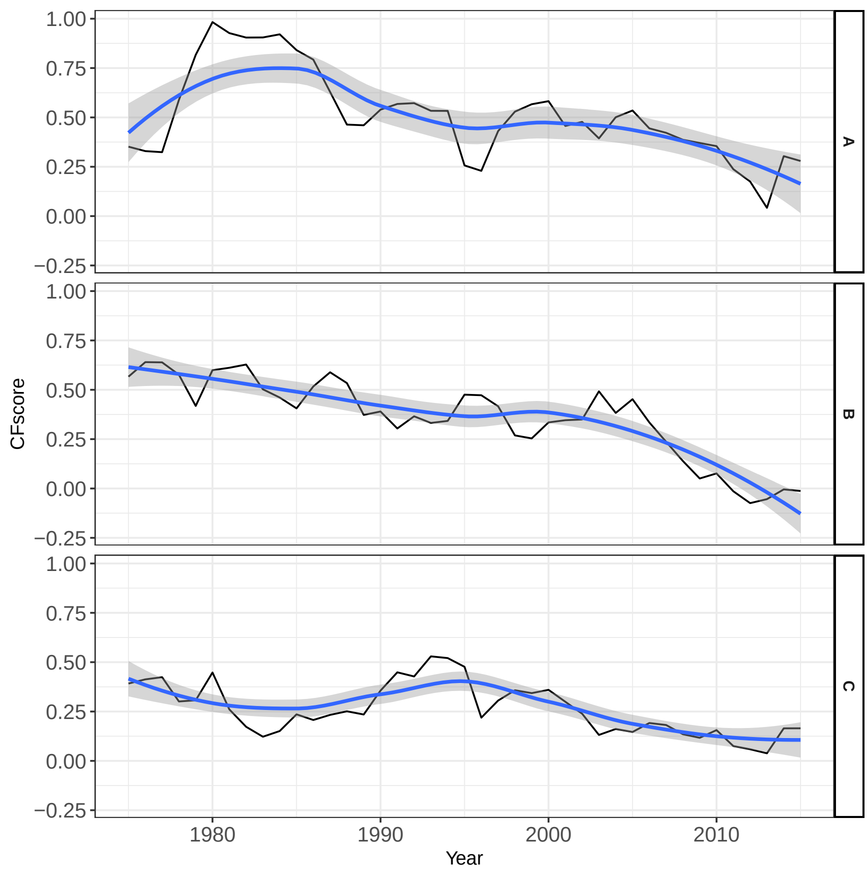


Figure 3.6: Mean Director CFscore, 1975-2015, by Class. Each panel displays the mean CFscore for each class of directors, each year. The blue lines are loess smoothing functions and the gray bands are confidence intervals. Average CFscores have fallen for each director class, but the decline has been the most pronounced among Class B directors.

Finally, to get a sense for how the ideological positions of the director classes may have changed over time, Figure 3.6 displays the average CFscore for each cohort of directors serving in a particular year, broken down by director class. Each mean has declined over time, but the trend is most pronounced among Class B directors: the average CFscore for Class B directors serving during the Obama Administration is about 0.6 point lower than for Class B directors serving around the end of the Carter Administration. One potential explanation for this differential decline is that gains in occupational diversity among the Reserve Bank directorates—a response to persistent pressure from Fed reformers in Congress—have largely come from Class B directors (Fessenden and Richardson 2016). I find some evidence of this in my sample: the percentage of Class B directors working in business (all sectors) has fallen from over 80% in the 1970s to 65% in the 2000s. At the same time, the percentage of lawyers, union executives, and nonprofit executives that have been elected as Class B directors has grown. By contrast, the share of business executives serving Class C directors has grown while the share of lawyers, academic, and union executives has fallen (see Appendix 3.7.6).

3.4.3 Variation in Director Ideology, Across Reserve District

Next, I explore the distributions of Reserve Bank director CFscores across the twelve Reserve districts. Figure 3.7 presents histograms of the distributions of director ideal points for each Reserve Bank. As the figure shows, there is a striking degree of distributional diversity. While several Reserve Banks—Cleveland, Kansas City, and Dallas, for example—are strongly right leaning, others—such as Philadelphia and San Francisco—are more bimodal. New York, interestingly, appears almost unimodal, while Boston is rare in its leftward alignment.

To more clearly observe the relative conservatism of each bank, Figure 3.8 compares the mean ideal points for each Reserve district, ranking them from least to most conservative. The error bars denote 95% confidence intervals. Several things stand out. First, two Reserve Banks over the 1975-2015 period have directorates with CFscores that average below zero: Boston and New York.[31] The mean CFscore for Boston Fed directorates (CFscore=0.436) is in the vicinity of the ideal points of former senators Max Baucus (D-MT) and Robert Byrd (D-WV), well-known "moderate" Democrats. Similarly, the average New York Fed directorate CFscore (-0.17) is in the vicinity of another former moderate Democratic senator, Ben Nelson (D-NE). The New York Fed's relatively liberal directorate is fairly surprising given the bank's well-documented intimacy with Wall Street (and thus, presumably, with inflation-averse banking interests). Second, on the other end of the ideological scale, the Kansas City and Minneapolis Reserve Banks have the most conservative directorates overall. The average CFscores of the Kansas City directorate (0.81) and Minneapolis directorate (0.79) place them in the vicinity of former senator Kit Bond (R-MO). Between the two least and most conservative directorates, there is a fair amount of ideological uniformity among the other Reserve Bank boards.

Consistent with the CFscore rankings, the directors of the Kansas City and Minneapolis Feds gave the highest share of contributions, about 80%, to Republican candidates and committees between 1980 and 2014. The directors of the Boston Fed gave by far the lowest share to Republicans: only 19% of Boston director contributions went to the GOP, well below the next-lowest shares of Republican contributions, 54% and 55%, made by directors from the St. Louis and New York Feds, respectively. Directors from the Dallas

[31] The difference is even more pronounced when comparing median CFscores across Reserve Banks. See Appendix 3.7.7.

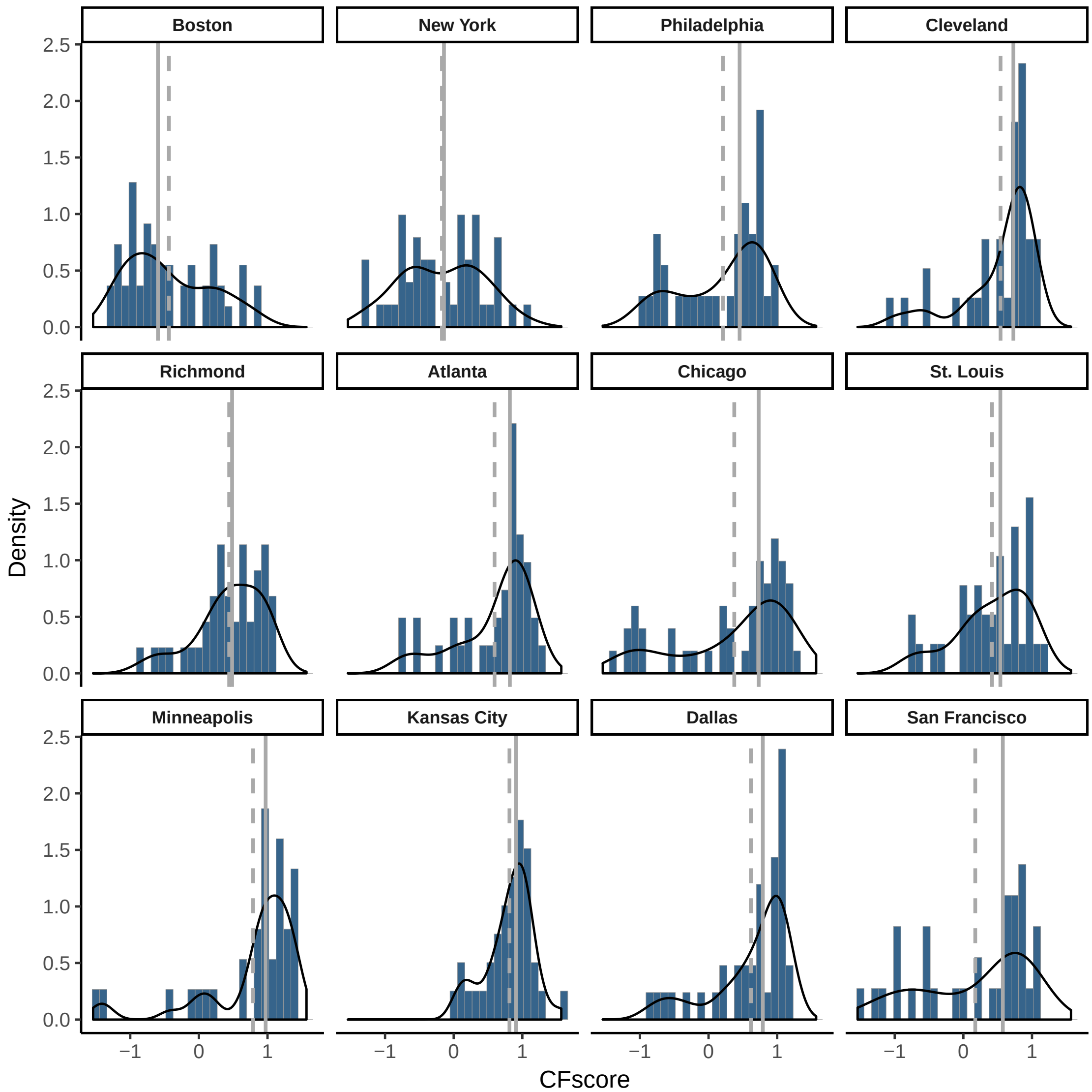


Figure 3.7: Distribution of Reserve Bank Directors CFscores, by Bank

Fed were both the most active and the most generous contributors relative to the other districts. The Philadelphia Fed had the least active contributors, while the Minneapolis directorate was the least generous (see Appendix 3.7.4).

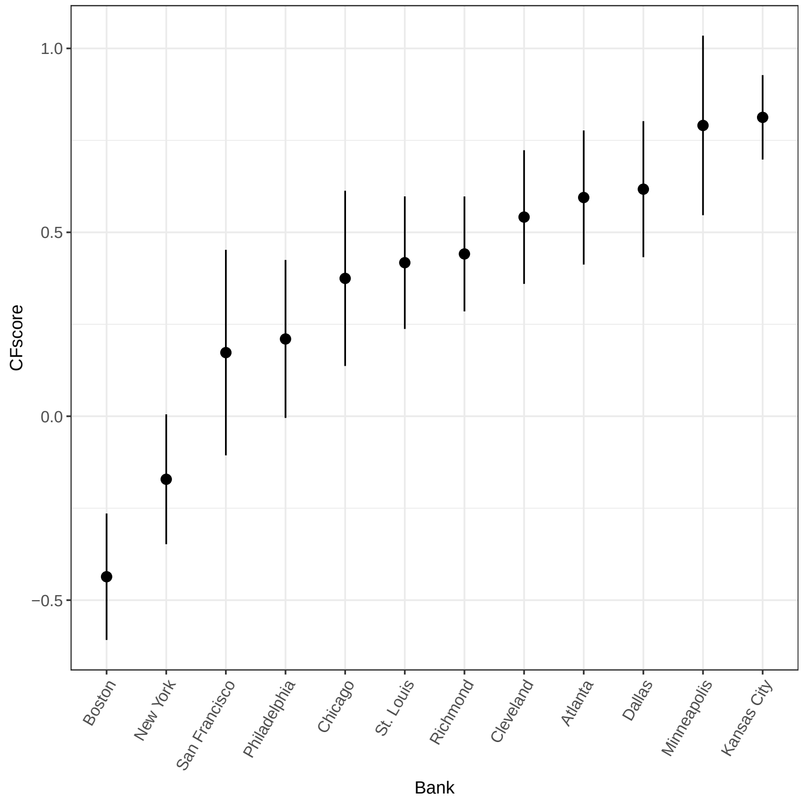


Figure 3.8: Mean Director Ideology, by Reserve Bank. The error bars denote 95% confidence intervals.

To test whether Reserve Banks headquartered in politically conservative cities are overseen by relatively conservative directorates, I run a bivariate OLS model using the Republican presidential election vote share in the headquarter city's county as the independent variable. I average the GOP vote share across each presidential election from 1976 through 2012. Table 3.5 shows there is a statistically significant positive relationship between a Reserve Bank county's average GOP vote share and the CFscores of the Reserve Bank's directors. A percentage point increase in GOP presidential vote share is associated with a 0.02 point increase in CFscores.[32] The results confirm a simple story of geographical selection: Reserve Banks in conservative areas have larger pools of conservatives from which directors are selected. It is worth noting, however, that this effect size

32 As an alternative, I also test for the relationship between director CFscores and a population-weighted average of GOP vote share across all counties in each Reserve district. To create this Reserve district-level measure, I compile a list of all counties in each Reserve district (Reserve Bank districts cross state lines but do not cross county borders). I then aggregate GOP vote totals across all counties in each Reserve district. I find a 1 percentage point increase in Reserve district GOP presidential vote share is associated with a 0.03 point increase in director CFscores. The coefficient is significant at the 0.001 level.

is likely muted by the fact that all of the Reserve Banks are located in relatively liberal urban areas.[33] In Missouri, for example, St. Louis City (an independently incorporated city) and Jackson County, home of Kansas City, were two of the three counties to vote for Hillary Clinton in the 2016 election; the other 111 Missouri counties voted for Donald Trump. Indeed, St. Louis City and Jackson County have voted Democratic in every presidential election since 1976. Richmond City and Dallas County were the only Reserve Bank headquarters where the GOP presidential vote share averaged more than 50% over the last 40 years, and even in these cases the average GOP vote share was below 60%.

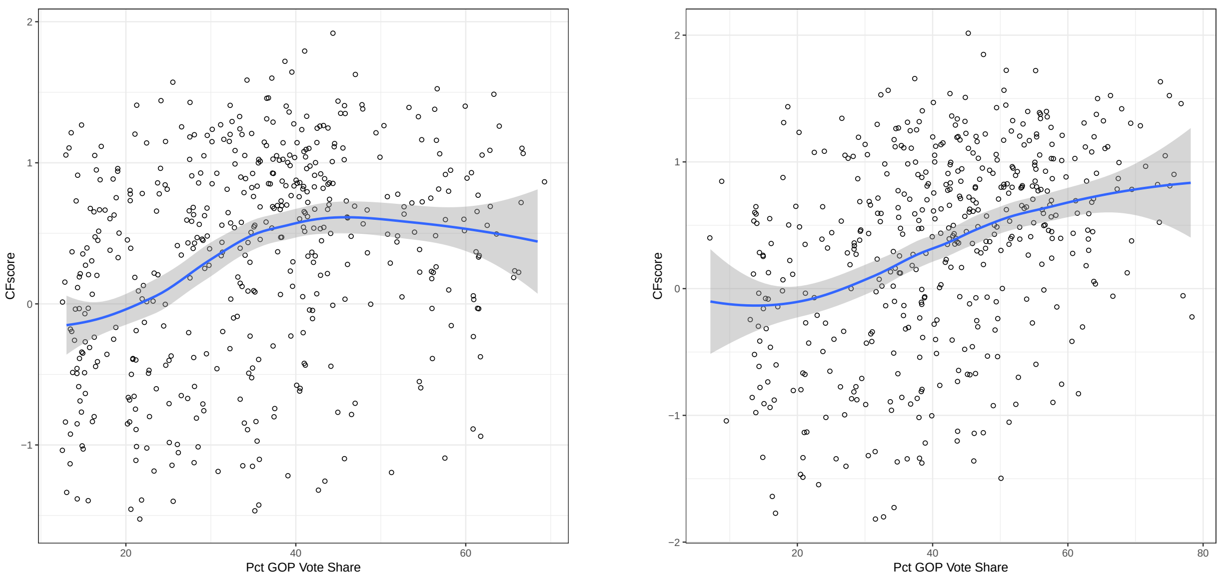
Table 3.5: Relationship Between Directorate Ideology and Regional Partisanship

	Dependent variable:
	CFscore
GOP vote share	0.02^{***}
	(0.002)
Constant	-0.26^{**}
	(0.08)
Observations	475
R^2	0.11
Adjusted R^2	0.10
Residual Std. Error	0.68 (df = 473)
F Statistic	56.33^{***} (df = 1; 473)
Note:	$^{*}p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$

As a further illustration, Figure 3.9 compares scatter plots of the relationship between GOP vote share and CFscores for (a) counties in which Reserve Banks are headquartered and (b) counties in which Reserve Bank directors reside.[34] The blue lines are loess smoothers with 95% confidence intervals. For both plots I assigned the GOP vote share for the closest presidential election to the start of a director's tenure; if the director's tenure overlapped with more than one presidential election, I took the average GOP vote share. As the left panel shows, Reserve Bank headquarter counties are most frequently Republican-minority. Directors live in counties that are more evenly distributed, however: the observations in the second panel are less clustered on the left side of the plot than observations in the first panel. In both cases there is a positive relationship between the the GOP presidential vote share and directors' ideology. As the GOP vote share increases, directors have higher (i.e. more conservative) CFscores.

[33] Controlling for the county's percent of the population living in urban areas only reduces the magnitude of the GOP vote share coefficient slightly, and it remains statistically significant.

[34] If the director's county of residence could not be confirmed I used the county in which their employer is based.



(a) Reserve Bank Headquarter Counties

(b) Reserve Bank Director Home Counties

Figure 3.9: Relationship between Director CFscores and GOP Presidential Vote Share. Panel A measures GOP vote share in the counties in which the 12 Reserve Banks are headquartered. Panel B measures GOP vote share in the counties in which Reserve Bank directors reside. The counties in which the Reserve Banks are headquartered are generally counties with GOP vote share below 50%. The counties directors reside in are more ideologically diverse.

Finally, to give a sense of how each Reserve Bank's ideology may have changed over time, Figure 3.10 displays the average CFscore of directors in each Reserve district since 1975. Data is pooled by decade (e.g. 1975-1985). The figure shows that the majority of directorates saw declines in average director CFscores over the last four decades. In particular, the directors of the San Francisco Fed have grown significantly less conservative over time. Between 1975 and 1985, the San Francisco Fed directorate was the third-most conservative, behind Minneapolis and Kansas City; between 2005 and 2015, the San Francisco Fed directorate is the second-most liberal, behind Boston. Only three Reserve Banks saw slight increases in director conservatism relative to the 1975-1985 decade: New York, Richmond, and Chicago. Overall, the pattern suggests the decline in the average director CFscore since 1975 is mirrored at the Reserve district-level.

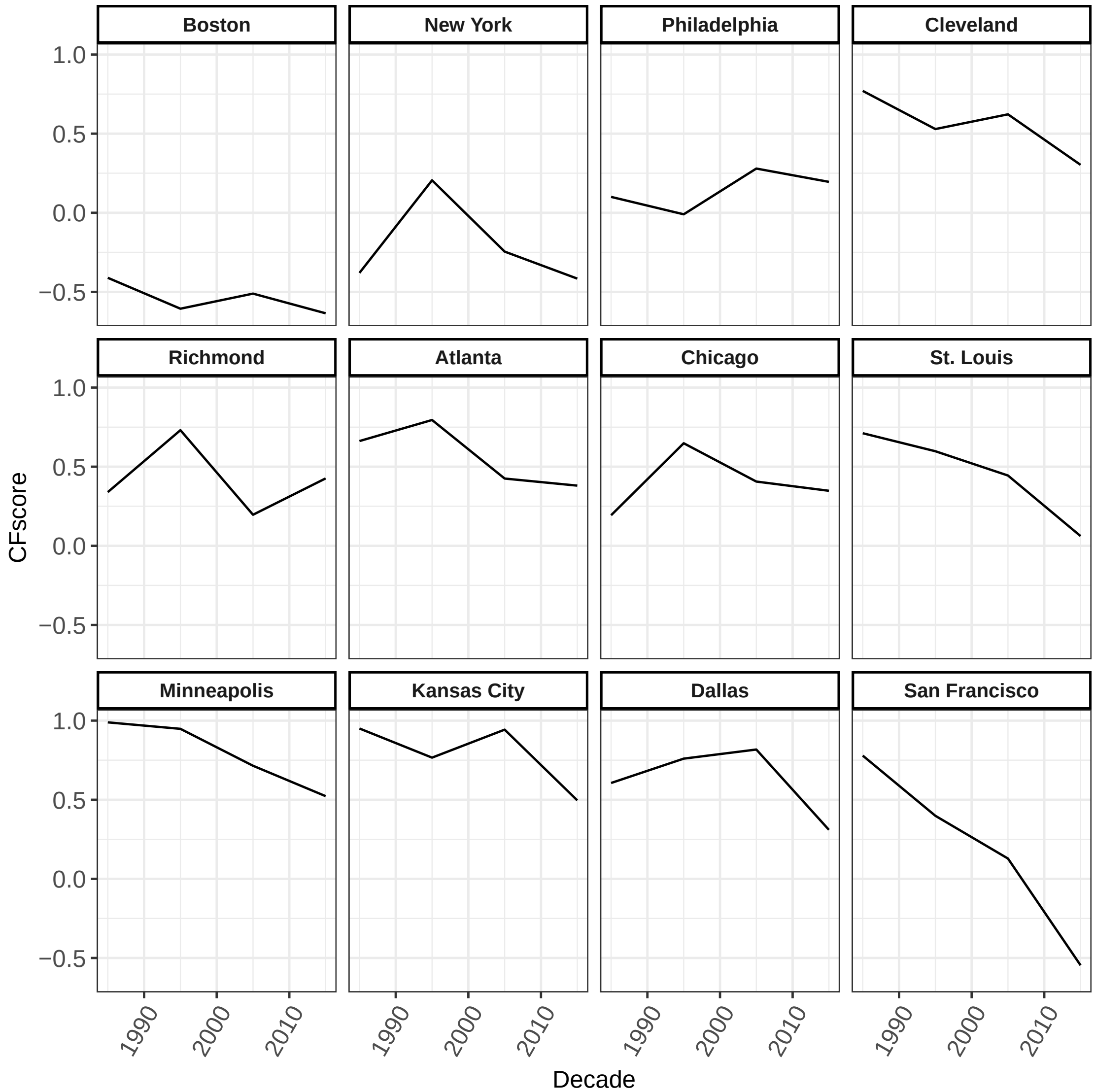


Figure 3.10: Mean Director CFscore, 1975-2015, by Bank. Each panel displays the mean CFscore for each Reserve Bank board, for each decade (1975-1985, 1986-1995, 1996-2005, and 2006-2015.) Most Reserve Banks saw a slight decline in average directorate ideology over the last four decades.

3.5 Regression Results

The preceding section described the distribution of the raw data and explored variation in director CFscores broken out by director class and Reserve Bank. In this section I evaluate the observed differences in director ideology taking into account directors' biographical characteristics. I estimate the following models for class and district variation:

$$Y_i = \beta_0 + \beta_1(class) + \beta_2[biographical] + \beta_3[county] + \epsilon_i \tag{3.1}$$

$$Y_i = \beta_0 + \beta_1(district) + \beta_2[biographical] + \beta_3[county] + \epsilon_i \tag{3.2}$$

Y_i denotes the CFscore for each director *i*. *Biographical* is a vector of individual-level traits for each director, including their profession, level of education, gender, and elected office experience. *County* is a vector of demographic and economic covariates for the director's county of residence. I average the county-level data over the years of the director's tenure; for instance, if the director served between 1990 and 1995, I take the average of the economic and demographic variables between 1990 and 1995. β_1 in each model is the coefficient on the variable of interest: director class and Reserve district. To clearly illustrate determinants of director ideology across each dimension, I estimate the class and Reserve district models separately. As discussed in Section 3.3.3, I correct the multivariate regression estimates for sample selection bias using a two-step Heckman model.[35]

Table 3.6 presents the results for the director class model, where director class is the independent variable of interest and director CFscore is the outcome.[36] Class A directors are the reference group. Given the strong correlation between the class distinctions and director profession categories—for example, the correlation between being a Class A director and a banker is 0.96—I exclude profession dummies from the models. Model 1 presents the simple bivariate relationship between director class and CFscores. Model 2 adds indicators for gender, age, and education.[37]. Model 3 adds county-level indicators to control for directors' areas of residence. I report robust standard errors for all models.

The bivariate results in Model 1 confirm the CFscores of Class B and Class A directors are lower than the average ideal point of Class A directors: Class C directors' CFscores are .31 point lower (p¡0.001) than the Class A mean. Class B directors' CFscores are 0.19 point lower (p=0.001). The results hold when controlling for directors' individual characteristics, though the difference in CFscores between Class A and Class B directors is now greater than the difference between Class A and Class C directors. The results also show that male directors have higher CFscores on average than women and directors with JDs have significantly lower CFscores than directors without JDs. The age a director was appointed, a director's membership in a business interest group (Chamber of Commerce, Business Roundtable, or NFIB), and whether a director ran for elected office do not have statistically significant effects on CFscores.

Adding controls for GDP of the director's state of residence, the county GOP vote share, and percent of the county population that resides in urban areas, the coefficient on Class B directors remains statistically significant. The coefficients on GOP vote share and real GDP are also significant. Consistent with results in the previous section, a percentage-point increase in the GOP vote share in a director's county is associated with a 0.02 increase in CFscores. States with higher GDP are also associated with lower CFscores.

The results suggest that while Class B directors are less conservative than Class A directors on average, and Class C directors are less conservative than Class B directors, after controlling for directors' personal characteristics Class C director ideology does not appear much different than Class A director ideology. Class B directors, however, are less

[35] For both the class and district OLS models, the uncorrected results are similar to the corrected results, suggesting little selection bias in the analysis. The Inverse Mills Ratio is not significant in either model.

[36] Note for space the table excluded some non-significant biographical variables.

[37] I also include variables denoting whether a director changed classes during their tenure and whether the director held a top management position (chairman, CEO, or president). These variables are not statistically significant in any model and I do not report them here

Table 3.6: OLS Results, Explaining Director Ideology (Class Model)

	Dependent variable:		
	CFscore		
	OLS	*Heckman corrected*	
	(1)	(2)	(3)
Class B	-0.19^{**}	-0.29^{*}	-0.27^{*}
	(0.06)	(0.13)	(0.12)
Class C	-0.31^{***}	-0.26^{*}	-0.10
	(0.06)	(0.13)	(0.11)
Male		0.31^{**}	0.14
		(0.11)	(0.12)
Age Appointed		0.003	0.01^{*}
		(0.004)	(0.004)
MBA		-0.12	0.07
		(0.09)	(0.09)
PhD		-0.23	-0.30
		(0.16)	(0.16)
JD		-0.44^{***}	-0.28^{*}
		(0.12)	(0.12)
No/2-year college		0.20	0.04
		(0.22)	(0.22)
Business Group Member		0.11	0.14
		(0.08)	(0.08)
Elected Office Run		-0.12	-0.22
		(0.18)	(0.19)
log(Real State GDP)			-0.08^{*}
			(0.04)
GOP Vote Share			0.02^{***}
			(0.003)
Pct Urban			-0.01
			(0.004)
Constant	0.47^{***}	0.34	0.80
	(0.04)	(0.41)	(0.62)
Observations	802	749	671
R^2	0.03	0.11	0.23
Adjusted R^2	0.03	0.09	0.21
ρ		-0.97	-1.14
Inverse Mills Ratio		-0.83 (0.70)	-0.99 (0.68)
Note: Class A is the reference group.	$^{*}p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$		

conservative as a group than Class A directors, even if they have similar educational backgrounds and live in similar areas. The findings are interesting considering that Class B and Class C directors have similar professional and educational backgrounds; one would expect that Class C directors would be at least as liberal as Class B directors controlling for directors' individual traits. Future research on the election of Class A and B directors should provide more insight into the pool of individuals that are nominated to serve as directors for each class.

Table 3.7 presents the OLS results of the relationship between the Reserve Banks (dummy coded) and CFscores. The reference group is the Richmond Fed, which falls in the middle of the Reserve Banks in terms of the ideology of its directors. The bivariate results from Model 1 confirm that relative to the Richmond Fed, the Boston, New York, and Philadelphia Feds have significantly lower average CFscores. The average CFscore for Boston's directorate, the least conservative in the sample by far, is nearly 3/4 of a point lower than Richmond's mean ideal point (CFscore=0.44). The directorates overseeing the Minneapolis, Kansas City, and Dallas Feds are more conservative than the directors overseeing Richmond Fed. Overall, I find statistically significant pairwise differences for 36/66 Reserve Bank pairs, including between the boards of the Kansas City and St. Louis Feds, the only Reserve Banks headquartered in the same state.

When controlling for education, profession, and other personal characteristics, Model 2 shows the negative coefficients on the Boston and New York Feds remain statistically significant, as do the positive coefficients on the Kansas City and Minneapolis Feds. In this model, directors with PhDs and JDs have less conservative ideologies than directors without PhDs or JDs.[38] Directors employed as union and nonprofit executives are also significantly less conservative. As with the class model, being male and being appointed to the Reserve Bank boards at a later age are associated with more conservative ideologies. The results hold when adding controls for state GDP, county GOP vote share, and the percent of the county living in urban areas, though the statistical significance of the coefficients on Minneapolis and Kansas City are eliminated.

Taken together, the district models underscore the relative liberalness of the Boston and New York Fed directors. These directors are significantly less conservative than the median Reserve Bank even after controlling for directors' backgrounds and geographic characteristics. The results also confirm that directors employed in industries beyond banking and business—law, academia, organized labor, and nonprofit institutions—are generally less conservative.[39] Greater occupational diversity on the Reserve Bank boards, a core demand of progressive groups focused on Reserve Bank governance reform, may

[38] While directors with PhDs in Economics compose a small part of my sample—there are only 25 of them—having an Economics PhD is associated with being *less* conservative. This is in contrast to previous literature on central banker ideology where having an Economics PhD, like having financial sector experience, is generally an indication of greater conservatism, at least with respect to monetary and regulatory policy. While CFscores do not measure ideology across different policy spaces, the negative coefficient on PhD economists may reflect the general conservatism of the population of directors—the vast majority of whom have experience in the financial sector or private industry.

[39] Among business executives, I observe some variation in ideology when breaking business out by sector. Directors working in energy, mining, and natural resources tend to be more conservative relative to other sectors, while directors working in real estate and construction tend to be less conservative.

Table 3.7: OLS Results, Explaining Director Ideology (District Model)

	Dependent variable:		
	CFscore		
	OLS	*Heckman corrected*	
	(1)	(2)	(3)
Atlanta	0.12	0.12	0.13
	(0.10)	(0.13)	(0.12)
Boston	-0.74^{***}	-0.85^{***}	-0.80^{***}
	(0.11)	(0.12)	(0.12)
Chicago	-0.06	-0.09	-0.01
	(0.12)	(0.12)	(0.12)
Cleveland	0.17	0.09	0.16
	(0.10)	(0.12)	(0.12)
Dallas	0.25^{*}	0.14	0.27
	(0.10)	(0.13)	(0.14)
Kansas City	0.28^{**}	0.31^{*}	0.12
	(0.10)	(0.14)	(0.14)
Minneapolis	0.33^{**}	0.37^{*}	0.18
	(0.12)	(0.17)	(0.17)
New York	-0.51^{***}	-0.51^{***}	-0.27^{*}
	(0.11)	(0.12)	(0.12)
Philadelphia	-0.22^{*}	-0.16	-0.16
	(0.11)	(0.13)	(0.12)
San Francisco	-0.12	-0.08	0.04
	(0.12)	(0.13)	(0.13)
St. Louis	0.02	0.19	0.16
	(0.10)	(0.17)	(0.16)
Male		0.29^{***}	0.20^{*}
		(0.08)	(0.08)
Age Appointed		0.01^{*}	0.01^{**}
		(0.003)	(0.004)
PhD		-0.22	-0.30^{*}
		(0.12)	(0.12)
JD		-0.44^{***}	-0.33^{***}
		(0.10)	(0.09)
Union Exec.		-1.11^{***}	-0.88^{***}
		(0.32)	(0.27)
Nonprofit Exec.		-0.69^{**}	-0.53^{**}
		(0.21)	(0.20)
log(Real State GDP)			-0.12^{***}
			(0.04)
GOP Vote Share			0.01^{**}
			(0.002)
Pct Urban			-0.003
			(0.002)
Constant	0.36^{***}	-0.07	1.03^{*}
	(0.07)	(0.31)	(0.49)
Observations	802	749	671
R^2	0.18	0.35	0.39
Adjusted R^2	0.17	0.32	0.35
ρ		-0.81	-0.61
Inverse Mills Ratio		-0.55 (0.36)	-0.37 (0.30)

Note: Richmond is the reference bank. $^{*}p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$

thus also result in moving the average ideal point of Reserve Bank directors to the left.

3.6 Conclusion

Reserve Bank directors are political actors and their decisions have important policy implications, both in terms of how the Fed makes monetary policy and the efficacy of the Fed as a financial regulator. Given directors' responsibilities for managing Reserve Bank operations, selecting Reserve Banks presidents, and structuring the bounds of discount rate policy, who governs the Reserve Banks is thus a fundamental question of policy relevance. This chapter aimed to provide a comprehensive investigation into who governs the Reserve Banks by documenting the biographical characteristics and political ideologies of Reserve Bank directors since 1975.

I show that the directors who govern the Reserve Banks are politically engaged and relatively conservative. Directors are more likely to donate to political campaigns, more likely to donate to Republican candidates, and more conservative than the average campaign donor in the United States. In particular, bankers elected by local banks (Class A directors) are more conservative than their non-banker counterparts, even after controlling for director's individual characteristics. I also find that the directors of the Boston and New York Reserve Banks are significantly less conservative than the directorates of the 10 other Reserve Banks, and indeed are the only directorates to have average ideal points that fall on the "liberal" side of the ideological scale. Lastly, I show that directors have become less conservative over time. Directors serving during the Obama Administration are the least conservative director cohorts to have served in the last 40 years.

While these findings are primarily descriptive, they are the first to establish the political leanings, and potential policy preferences, of the powerful and often inconspicuous political actors that govern the "private" arm of the Fed. Below, I suggest several extensions that would contribute to a research agenda on Reserve Bank governance.

First, future work should attempt to tie director ideologies to observable policy outcomes in order to better gauge the relevance of director identity and ideology to the policymaking process. The analysis presented here hints at one consequence of directors' conservatism: they select conservative Reserve Bank presidents. Indeed, Reserve Bank presidents serving as conservative counterweights in the FOMC is a well-established empirical finding (Woolley 1984; Chappell, Havrilesky, and McGregor 1993; Meade and Sheets 2005), and this analysis provides an intuitive explanation for why this might be the case: the conservative bias among Reserve Bank presidents is reflected in the directorates as well. It follows that Dodd-Frank's exclusion of Class A directors, the most conservative of the bunch, from the Reserve Bank president selection process could presumably result in the appointment of less conservative Reserve Bank presidents going forward. Future work could exploit this institutional change with an interrupted time-series design to get leverage on this research question. While the recentness of the change coupled with presidents' relatively long terms poses some data challenges, this kind of study is appealing because it engages directly with questions of whether reforms aimed at eliminating the influence of banks—and a perceived threat of "capture"—are effective.

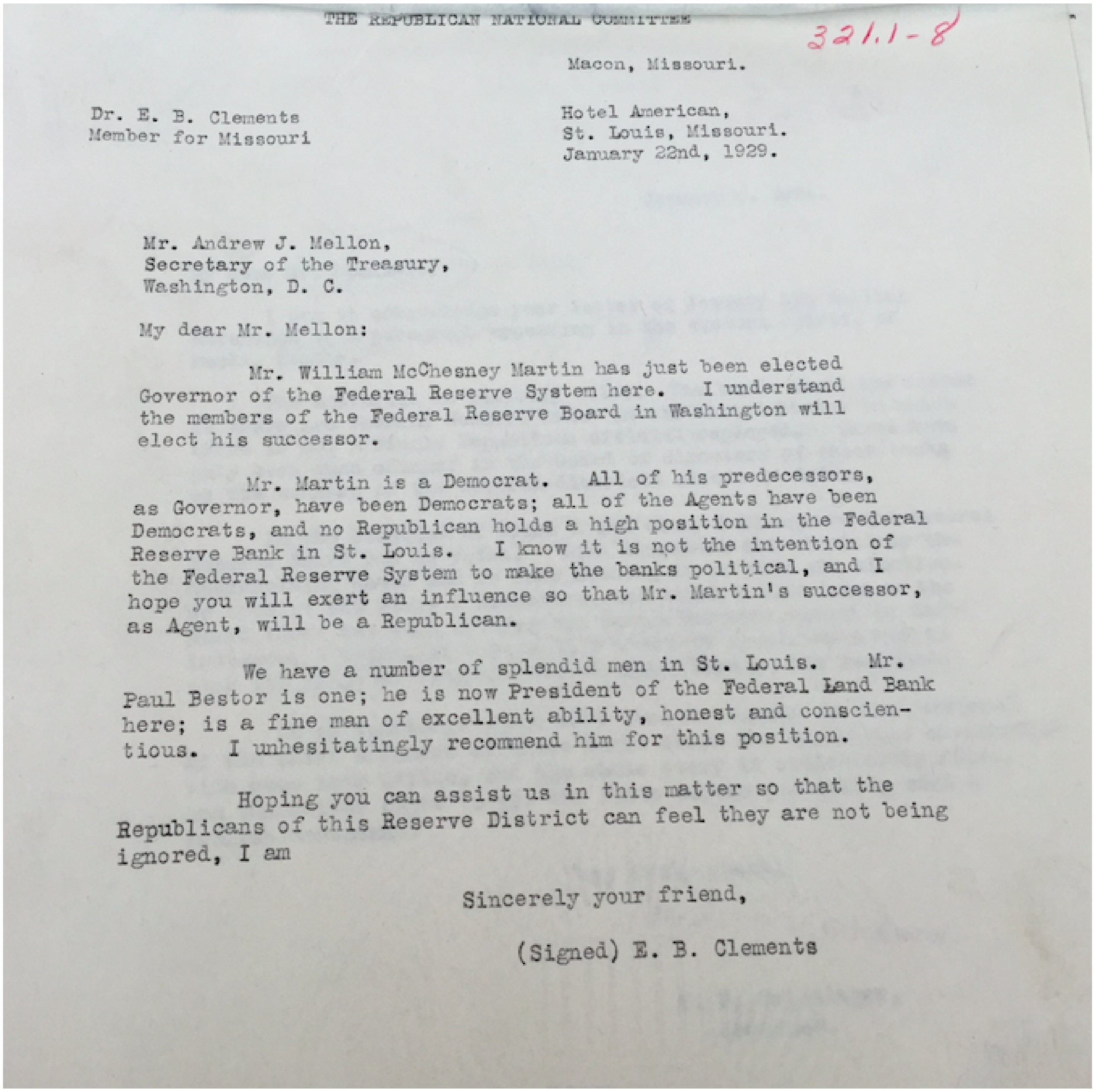
Beyond the appointment of Reserve Bank presidents, the opacity of directors' policy activity means there are few available data sources that can be leveraged to explore the effect of director ideology on policy outcomes. Discount rate recommendations, however, are one promising option. Do less conservative boards, like those governing the Boston Fed, recommend lower discount rates relative to other Reserve Bank boards? Does the overall decline in director ideology observed in this analysis track with less hawkish discount rate recommendations over time? Regulatory enforcement actions may be another viable data source to tie director ideology to policy outcomes. Though directors are prohibited from engaging in regulatory affairs at the Reserve Banks, Class B and C directors are involved in making personnel decisions in this domain, and the boards more generally are tasked with managing the Reserve Banks' operations. Publicly available data on Reserve Bank regulatory enforcements may allow us to determine, for instance, whether more liberal boards are associated with more aggressive Reserve Bank enforcement.

Second, one of the more surprising results of this analysis is that the directorates of the New York Fed are significantly more liberal relative to other directorates. But this is perhaps surprising only if one accepts the common—though not clearly substantiated—wisdom that business, and particularly finance, is politically conservative. As many researchers have argued, business is not a monolith (Dahl 1961; Smith 2000; Hart 2004); bank size, industry sector, economic conditions, and a host of other factors surely structure individual firm preferences. The election of Class A and B directors by private banks thus offers a unique opportunity to explore what banks want when they are choosing representatives to govern the Reserve Banks. Are larger banks likely to select more liberal directors than smaller—and presumably more inflation-averse—community banks? Does the geographic location and sectoral character of the area in which the bank operates influence which types of directors are likely to be elected? The answers to these questions have implications for research that considers the different means by which business interests participate and make their voices heard in the policymaking process.

Lastly, the reliance on CFscores in this analysis is of concern given that there are few other measures of Reserve Bank director ideology or policy preference against which the scores can be externally validated. Moreover, while a large literature finds a strong association between political ideology—what CFscores presumably capture—and monetary ideology, a more precise measure of preferences over monetary and regulatory policy would be preferable. The composite nature of CFscores means we cannot directly infer directors' positions on specific policy areas, a feature that is especially problematic if one considers the rise of "socially liberal" corporate executives such as Jamie Dimon, chairman of JP Morgan Chase and former Class A director for the New York Fed. If bankers and business executives are supporting liberal candidates and causes for social policy and more conservative candidates on economic policy, CFscores for these individuals are likely more "moderate" than would be the case if observing preferences over economic policy specifically. While there have been numerous efforts scaling the monetary ideology of Fed governors and presidents using FOMC votes and transcripts, the lack of comparable information for Reserve Bank directors mandates a different approach. One potential solution would take inspiration from research on the ideology of bureaucrats and scale monetary policy preferences by surveying Reserve Bank directors on policy questions (see, for example, Malhotra and Jessee 2014). Such surveys would provide a means to construct ideology measures that could be compared against CFscores.

3.7 Appendix

3.7.1 Archival Record



THE REPUBLICAN NATIONAL COMMITTEE

321.1-8

Macon, Missouri.

Dr. E. B. Clements
Member for Missouri

Hotel American,
St. Louis, Missouri.
January 22nd, 1929.

Mr. Andrew J. Mellon,
Secretary of the Treasury,
Washington, D. C.

My dear Mr. Mellon:

Mr. William McChesney Martin has just been elected Governor of the Federal Reserve System here. I understand the members of the Federal Reserve Board in Washington will elect his successor.

Mr. Martin is a Democrat. All of his predecessors, as Governor, have been Democrats; all of the Agents have been Democrats, and no Republican holds a high position in the Federal Reserve Bank in St. Louis. I know it is not the intention of the Federal Reserve System to make the banks political, and I hope you will exert an influence so that Mr. Martin's successor, as Agent, will be a Republican.

We have a number of splendid men in St. Louis. Mr. Paul Bestor is one; he is now President of the Federal Land Bank here; is a fine man of excellent ability, honest and conscientious. I unhesitatingly recommend him for this position.

Hoping you can assist us in this matter so that the Republicans of this Reserve District can feel they are not being ignored, I am

Sincerely your friend,

(Signed) E. B. Clements

Figure 3.11: Letter from E.B. Clements, Missouri representative of the Republican National Committee, to Treasury Secretary Andrew Mellon, dated January 22, 1929. National Archives and Records Administration (Group 82, Box 854).

3.7.2 Missing Data

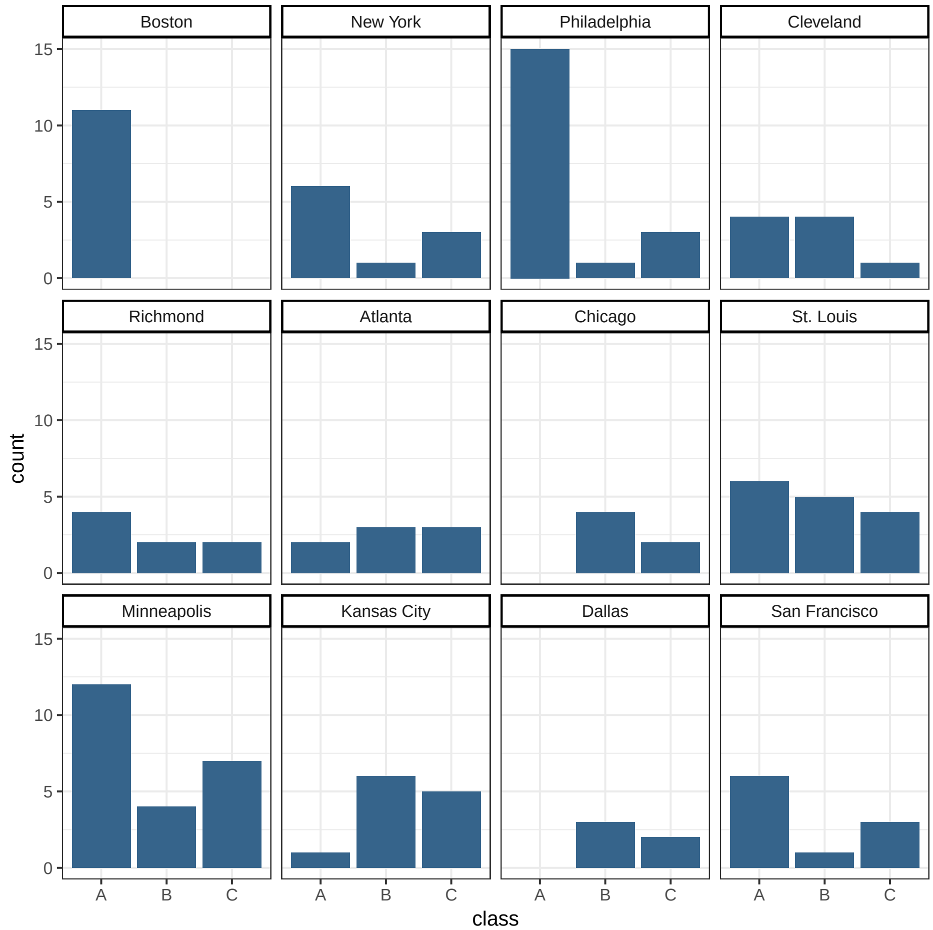


Figure 3.12: Distribution of Unmatched Directors, by Class and Reserve Bank. The figure shows the 136 directors who were not matched to DIME by Reserve Bank and class. Roughly half of all unmatched directors are Class A. Directors from the Minneapolis and Philadelphia Feds are the most likely to be excluded from DIME, while directors from the Dallas and the Chicago Feds are most likely to be matched to DIME.

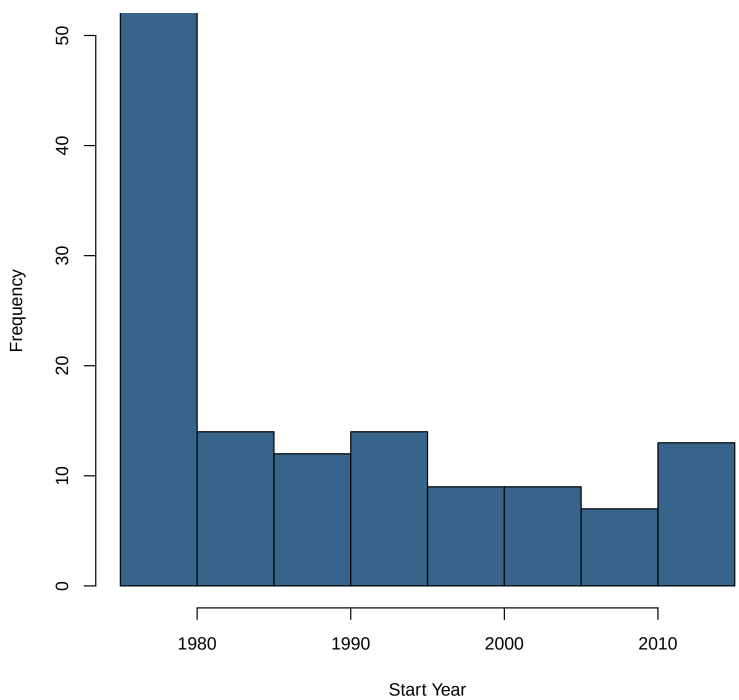


Figure 3.13: Distribution of Unmatched Directors, by Start Year. The bar chart shows the counts of directors not matched to DIME by the year the director first joined the Reserve Bank board. A large number of the unmatched directors in the sample were those who began serving prior to 1980. Because directors are generally appointed to the Reserve Bank boards later in their careers, and because DIME does not include contribution records prior to 1979, it seems likely that a substantial number of the unmatched directors were elderly or deceased at the start of the DIME sample. Examining the distribution of unmatched directors by the year in which the director finished their service on the board shows a similar pattern.

3.7.3 First-Stage Heckman Selection Model Results

Table 3.1: First-Stage Heckman Model Results

	Dependent variable:
	Assigned CFscore?
Male	0.15
	(0.17)
Banker	−0.92
	(0.47)
Business	−0.72
	(0.47)
Academic	−1.70**
	(0.59)
Union Exec.	3.23
	(183.48)
Nonprofit Exec.	−1.30*
	(0.56)
JD	0.17
	(0.23)
MBA	−0.06
	(0.15)
PhD	0.35
	(0.33)
MD	−0.03
	(0.76)
No college/2-year	−0.26
	(0.37)
GOP Vote Share	−0.01
	(0.005)
log(Real State GDP)	0.002
	(0.06)
Pct Urban	0.01**
	(0.003)
No. Elected Exec.	0.10*
	(0.04)
Constant	0.96
	(0.86)
Observations	752
R^2	0.27
Adjusted R^2	0.26
ρ	−1.29
Inverse Mills Ratio	−1.21 (0.63)
Note:	*p<0.05; **p<0.01; ***p<0.001

3.7.4 Summary of Contributions, by Class and Bank

Table 3.2: All Campaign Contributions, by Director Class

Class	Number of Directors	Number of Contributions	Contributions per Director	Avg Contribution	Percent to GOP
A	294	9,549	32.5	$926	71%
B	276	14,648	53.1	$1,458	61%
C	233	15,328	65.8	$1,654	63%

Note: Sample limited to directors who contributed to Democratic, Republican, or Independent candidates and committees. Class C directors are the most active contributors over the 1975-2015 period, making roughly 66 contributions per person compared to 53 contributions per Class B director and 33 contributions per Class A director. Class A directors contribute to Republican candidates and committees more frequently than Class B and C directors, with 71% of all contributions from Class A directors going to Republican recipients, compared to 61% and 63% from Class B and Class C directors, respectively.

Table 3.3: All Campaign Contributions, by Reserve Bank

Bank	Number of Directors	Number of Contributions	Contributions per Director	Avg Contribution	Percent to GOP
Boston	74	3,542	47.9	$1,208	19%
New York	73	5,139	70.4	$1,736	55%
Philadelphia	63	1,795	28.5	$960	67%
Cleveland	69	3,041	44.1	$1,250	78%
Richmond	79	2,669	33.8	$1,205	74%
Atlanta	65	2,929	45.1	$980	65%
Chicago	66	3,525	53.4	$1,371	71%
St. Louis	54	2,209	40.9	$991	54%
Minneapolis	67	2,199	32.8	$836	82%
Kansas City	65	3,303	50.8	$1,745	80%
Dallas	64	5,677	88.7	$1,826	70%
San Francisco	64	3,497	54.6	$1,645	66%

Note: Sample limited to directors who contributed to Democratic, Republican, or Independent candidates and committees. Dallas directors are the most active contributors over the 1975-2015 period, making 89 contributions per director in the sample. Directors from the Minneapolis and Richmond banks were the least active, with 33 and 34 contributions per director, respectively. Directors from the Minneapolis (82%) and Kansas City (80%) banks contributed the highest share of their contributions to Republican candidates and committees. Directors from the Boston bank contributed the lowest share (19%) to Republican candidates.

3.7.5 Ideology of Incoming Director Cohorts

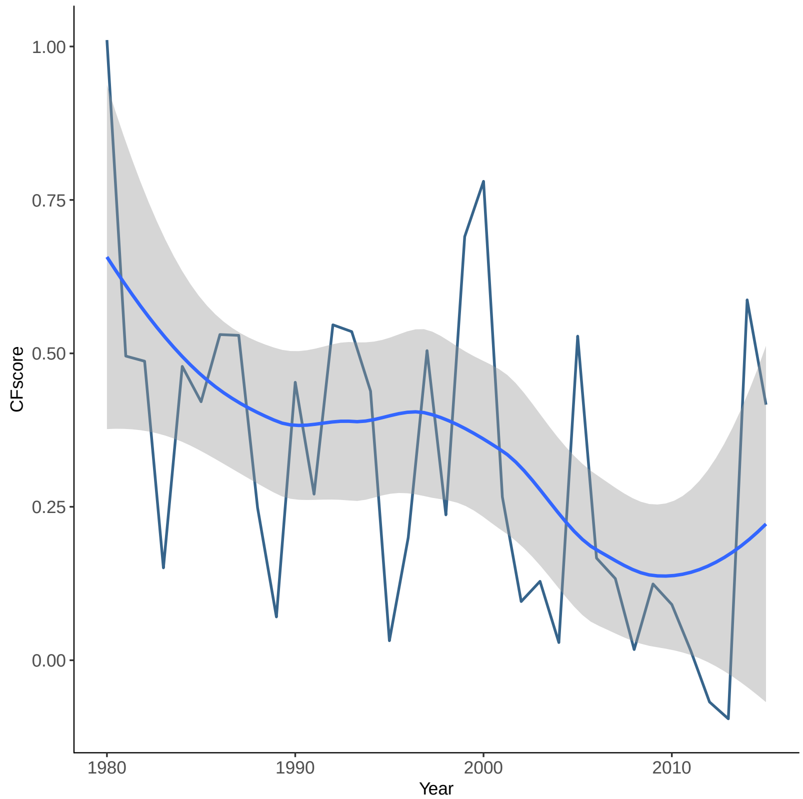


Figure 3.14: Mean Ideology of Incoming Cohorts, 1980-2015. The blue line is a loess smoother and the gray band denotes the 95% confidence interval around the mean estimates. The figure shows that the average CFscore of incoming directors each year—that is, the average ideal point of those directors serving their first year on the Reserve Bank boards—has declined between 1980 and 2015. The measure is noisy given the small number of directors each year—the n each year ranges from a high of 19 to a low of 7 in early years— though the decline in newcomer CFscores persists when subsetting the sample to exclude earlier years where data is more sparse. Nonetheless, the figure suggests that the observed decline in mean director ideology is likely driven by the selection of slightly less conservative directors over time.

3.7.6 Director Professions by Class, Over Time

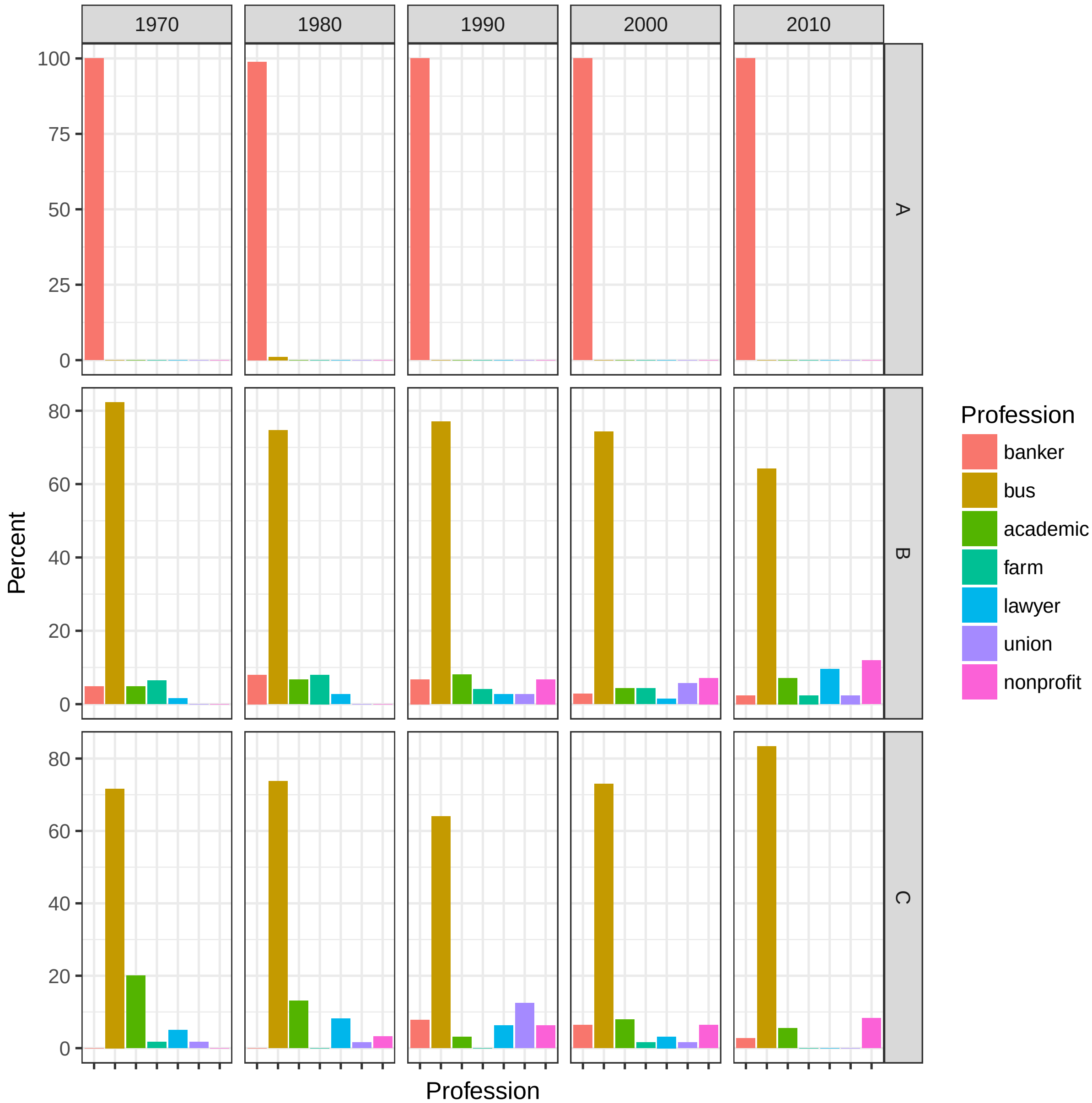


Figure 3.15: Share of directors employed as bankers, business executives (all sectors), academics, farmers and ranchers, lawyers, union executives, and nonprofit executives.

3.7.7 Summary of Director CFscores, by Class and Bank

Table 3.4: Summary of Director CFscores, by Class

Class	n	Mean	Median	Min	Max	SD
A	147	0.48	0.69	-1.47	1.44	0.61
B	172	0.30	0.52	-1.26	1.43	0.74
C	156	0.22	0.51	-1.54	1.57	0.76

Note: Summary statistics for director CFscores across director classes. The sample is subsetted to include only those directors who were assigned a CFscore and contributed to at least eight distinct candidates or committees.

Table 3.5: Summary of Director CFscores, by Bank

District	Bank	n	Mean	Median	Min	Max	SD
1	Boston	51	-0.44	-0.60	-1.30	0.79	0.61
2	New York	47	-0.17	-0.14	-1.32	1.00	0.60
3	Philadelphia	34	0.21	0.45	-1.01	0.90	0.62
4	Cleveland	36	0.54	0.73	-1.03	1.01	0.54
5	Richmond	41	0.44	0.48	-0.85	0.95	0.49
6	Atlanta	38	0.59	0.82	-0.77	1.13	0.55
7	Chicago	47	0.37	0.73	-1.38	1.17	0.81
8	St. Louis	36	0.42	0.54	-0.80	1.04	0.53
9	Minneapolis	35	0.79	0.97	-1.47	1.39	0.71
10	Kansas City	37	0.81	0.91	0.05	1.24	0.34
11	Dallas	39	0.62	0.79	-0.88	1.06	0.57
12	San Francisco	34	0.17	0.57	-1.54	1.05	0.80

Note: Summary statistics for director CFscores across the Reserve districts. The sample is subsetted to include only those directors who were assigned a CFscore and contributed to at least eight distinct candidates or committees.

Chapter 4

The Electoral Dynamics of Reserve Bank Governance[1]

> "I am pleased to advise you that the Federal Reserve Board has been under no political pressure whatever, so far as I know. The only pressure that the Board has been under is bank politics rather than political politics. It is to be regretted that there is entering into the system bank politics which will be more destructive to the system than political politics." — D.R. Crissinger, chairman of the Federal Reserve Board, 1923-1927. [2]

The previous chapter documented the biographical characteristics and ideological distributions of Reserve Bank directors. While the average director is male, highly educated, and conservative, I find considerable variation in director ideology and biographical characteristics across Reserve Banks and director class. In this chapter, I examine one of the processes that generate these outcomes: the election of Class A and Class B directors by member banks.

As the key juncture in which private banks first formally participate in Reserve Bank governance, director elections provide a unique opportunity to illuminate the mechanism by which banks select individuals to represent them in the Federal Reserve System, as well as the consequences of this mechanism. Specifically, analyzing elections allows us to evaluate the extent to which banks make use of this channel, how competitive the elections are, and the factors that drive banks' selections of board representatives. In doing so, the electoral process can also provide insight into the sources of the Reserve Bank boards' conservatism and ideological variation across districts. In short, understanding the role of private influence in Fed policymaking must start with an examination of how banks select peers to represent their policy interests when governing the affairs of the Reserve Banks.

[1] I am extremely grateful to Alex Mendoza, Thomas Kadie, and Zachary Fry for research assistance on this chapter. I also thank Reserve Banks staff for providing me with access to historical election ballots and archivists at the National Archives at College Park for assistance with records requests.

[2] Letter to Roy A. Young, governor (president) of the Federal Reserve Bank of Minneapolis, dated December 13, 1923. National Archives and Records Administration (Group 82, Box 854).

I analyze an original dataset of Class A and Class B director elections between 1980 and 2015. In the first part of the chapter, I describe the contours of the electoral landscape and document variation in election dynamics across multiple dimensions, including Reserve Bank, director class, and member bank group. As in the previous chapter, the hope is that detailed description will not only provide a snapshot of what director elections look like in practice, but also facilitate future theory building around the politics of Reserve Bank governance. In the second part of the chapter, I conduct simple regression analyses to evaluate potential predictors of candidate victory and election contestation. The goal here is to explore the utility of existing theories of electoral politics for explaining Reserve Bank elections dynamics, and suggest other theoretical frameworks that might present fruitful ways forward.

I highlight three groups of findings. First, I show that consistent with earlier studies, director elections are rarely contested. Across Reserve Banks, however, contestation rates vary significantly. Around 40% of elections at the St. Louis Fed are contested, for example, compared to 1% of elections at the Richmond Fed. The overall low rate of contestation is driven by a dearth of nominations. Despite the low cost of submitting a name, only about 13% of banks eligible to nominate a candidate in each election do so.

Second, I find that among contested elections, the candidate with the most nominations is significantly more likely to win. Voting banks appear to view nominations as endorsements and use them to guide their vote choice. By contrast, banks do not appear to vote according to some measure of candidate quality as defined by a candidate's professional or educational background, or their affiliation with industry interest groups. Nor does it appear that banks are picking up and selecting on candidate political ideology. Directors lean conservative not because voting banks are choosing the more conservative candidate, but because the candidates are conservative to begin with. In addition, I do not find robust evidence of an incumbency advantage in director elections in my sample.

Third, I find evidence that elections using nomination committees—regional state banking associations that recommend the name of a preferred candidate for nomination—have significantly fewer candidates running than elections that do not involve nomination committees. The results suggest that when banking associations formally participate in the nomination process, they succeed in getting their preferred candidate on the ballot and, ultimately, elected. Low contestation in director elections may be explained by the coordination banking associations provide during the nomination stage, rather than member bank apathy.

Together, these findings provide insight into the electoral process underlying Reserve Bank governance. In doing so, I contribute to several recent efforts that investigate bank participation in director elections (Adams 2017; Black and Dlugosz 2017). More broadly, the analysis contributes to our understanding of how interest groups can influence policy from within (quasi-) governmental institutions (e.g. Anzia and Moe forthcoming), as well as to our understanding of the diversity of electoral contexts in the U.S.

The chapter is organized as follows. Section 4.1 provides an overview of the Reserve Bank director election process, while Section 4.2 reviews relevant literature. Section 5.1 describes the collection and construction of a new dataset of director elections. In Section 4.4, I present a detailed descriptive analysis of the data. Section 4.5 provides an analysis of who wins director elections. In Section 4.6, I conduct an exploratory analysis of the determinants of election contestation. Section 5.3 concludes with suggested paths forward.

4.1 Reserve Bank Director Elections

Class A and B directors are elected to three-year terms and are generally limited to serving two terms. As delineated by Section 4 of the Federal Reserve Act, each of the twelve Reserve Banks selects their Class A and B directors through a preferential voting system conducted by group. Member banks in each district are classified into three groups according to capitalization, with Group 1 comprising the largest banks and Group 3 the smallest.[3] The threshold capital levels vary over time and across Reserve districts. In 1980, for instance, Group 1 member banks of the St. Louis Fed had at least $4 million in capital, significantly less than the $185 million held by Group 1 members of the New York Fed. In 2015, the New York Fed's Group 1 banks had capital of at least $1 billion. Each of the three voting groups nominates and elects one Class A and one Class B director, presumably to ensure that member banks have equal representation on the boards regardless of their size. Given the boards' staggered composition, elections are generally held for one Class A and one Class B director each year, though unexpired terms may be filled via special election. Each eligible bank may cast one vote in in each race. Bank-holding companies with multiple subsidiary banks in a Reserve district may designate only one bank to participate in the director election process. Nominations and votes must be cast by a designated bank officer, usually the president or CEO.

In the months prior to an election, Reserve Banks distribute a circular to member banks notifying them of the upcoming vacancies on the board, the date on which the election(s) will be held, whether the incumbent directors whose terms are expiring are eligible and willing to stand for reelection, and the list of banks eligible to participate in the election. In addition, the circulars open a call for nominations where each eligible bank may submit one name, including one from their own bank, to be added to the ballot. After about one month, Reserve Banks then circulate a ballot with the list of nominees, their biographies, and the names of the banks that nominated each candidate. Member banks have 15 calendar days to cast their votes, which remain anonymous. If an election has more than two candidates running for the same seat, banks must rank the choices. A candidate is declared the winner if they receive a majority of first-choice votes. While elections were primarily conducted via mail for much of the Fed's recent history, Reserve Banks now allow for online submissions of nominations and votes. Appendix 4.8.1 displays a ballot.

In some cases, Reserve Banks utilize nominating committees—composed of representatives from state banking associations or groups of executives from member banks—to recommend names for Class A and B candidates. While the nominating committees themselves cannot nominate a candidate, they appear highly effective at structuring the ballot as discussed later in the chapter.

[3] The Act provides for the Board of Governors to make these classification but this authority has been delegated to the Reserve Banks.

4.2 Related Literature

This study most directly contributes to a small body of literature that examines the Reserve Bank director election process, both as a means to better understand the Federal Reserve System and to gauge private interest influence in its policymaking. Early accounts of director elections from the early 1930s describe an essentially pro forma process (Bopp 1935; Clark 1935). These studies found that elections were rarely contested and largely controlled by state banking associations. Either through their participation as a nominating committee, or informal back channels, banking associations were effective in coaxing members banks to coalesce around their preferred candidate and submit their name for nomination. Director elections, in other words, do not function as a democratic selection process.

Later anecdotal accounts describe a similar process. In his survey of Reserve Banks in the early 1970s, Mayer (1976) found that banking associations—and, in at least one Reserve district, the Bank president–controlled the nomination process. Consequently,"in many Districts it is not really true that the majority of directors are chosen in a meaningful way by the member banks" (Mayer 1976). Similarly, a comprehensive 1976 report by the U.S. House Committee on Banking, Currency and Housing concluded:

> "[T]he idea of broad democratic input on the part of the member banks in an 'election' is largely a facade. Rather the process appears to be a ratification of whatever nominating process exists in each district—in some cases nominations by bank lobbying organizations; in others, less formal bank nominations; and in others, a process influenced by the System itself. Miraculously, the 'voting' commercial banks scattered throughout each district agree on the names with rare dissents" (U.S. House 1976).

Empirical demonstrations of these early cross-sectional descriptions have only recently been conducted. Specifically, financial economists studying the behavior of corporate boards of directors have turned attention to the Reserve Banks to estimate the monetary value of holding a Reserve Bank director seat (Adams 2017; Black and Dlugosz 2017). These studies examine contemporary Class A and Class B election and find that banks (but not other companies) represented on the boards receive a private benefit in the form of higher stock prices. Markets apparently view Class A directorships as an opportunity to obtain inside information. Beyond the private benefits of board service, Adams (2017) also finds that, consistent with the early anecdotal accounts, director elections are rarely contested, particularly for Class B seats. She also finds suggestive evidence, again in keeping with the early studies, that director candidates that served on the leadership of the American Bankers Association (ABA) are more likely to win election. However, these studies do not examine across-Reserve Bank differences in electoral outcomes, or consider candidate attributes or trends in member banks' participation. I focus on these features in the following analyses.

Beyond these director election studies, examining other electoral contexts in the U.S. may provide additional benchmarks for our expectations of director election dynamics. Local elections, for example, share similar features of director elections. Local elections are regional, often non-partisan, and largely "managerial" in the sense that voters select candidates primarily on the basis of competence over custodial issues rather than political ideology (Oliver, Ha, and Callen 2012). These elections feature much lower turnout and less contestation than their more salient national counterparts (Hajnal, Lewis, and Louch 2002; Gray 2004; Trounstine 2013; Anzia 2014). I return to this literature in the regression analyses in Sections 4.5 and 4.6. Zooming out to American politics more broadly, recent literature that conceptualizes political parties as coalitions of policy demanding groups suggests another way of thinking about director election politics (Cohen et al. 2008; Bawn et al. 2012; Hacker and Pierson 2014). According to this school, interest groups use the nomination stage of elections to coordinate the selection of a preferred candidate. Nominations thus provide an opportunity for groups to join forces to select a candidate they can all agree on, rather than compete with each other during the election stage. In a sense this logic is compatible with Bopp's account of highly coordinated action by state banking associations. We should expect, then, that banking associations (which are groups of member banks) play a role in coordinating the nomination of directors to ensure the banks' preferred candidate makes it on the ballot—and is unlikely to face a competitor.

The large literature on corporate governance and private sector board elections may also offer insight. Reserve Bank boards are, of course, designed in the mold of corporate boards of directors and many of the member banks participating in Reserve Bank elections likely have experience in a corporate election setting. Corporate director elections are even less likely to be contested than local elections; over 99% of director elections are uncontested each year (Hirst 2018; Cai, Garner and Walkling 2009; Bebchuk 2007).

Overall, these literatures suggest director elections are likely to be low-contestation and low-participation environments. Even if these elections are pro-forma, as early accounts suggest, they remain the direct avenue for banks to participate in Fed governance. Whether and how banks use this channel is of interest for understanding the Federal Reserve and private interest influence in policymaking.

4.3 Director Election Data

This analysis employs an original dataset of Reserve Bank director elections from 1980-2015. Election ballots circulated to member banks are the primary data source. To obtain ballots, I submitted information requests to Reserve Banks' research and legal departments beginning in December 2016. While the Reserve Banks are not subject to the Freedom Of Information Act (FOIA), most have issued their own information request policies that aim to abide by the "spirit" of the Act. At some Reserve Banks, these records were already digitally archived and my requests were fulfilled within weeks. In other cases, however, Reserve Banks had to locate and digitize the documents, review them for sensitive information, and vet the records through their legal department before release. For five of the Reserve Banks, archived ballots were available online for at least some of the years of interest.

My sample, summarized in Table 4.1, consists of ballots for 601 Class A and B contests going back to 1980. I obtained ballots for all but one of the Reserve Banks, Atlanta. For two additional Banks, Philadelphia and Chicago, I obtained ballots only for recent years.[4] The most complete records in my sample come from the New York, Richmond, and Dallas Feds. My sample of contests is considerably larger than those collected by Adams (n=201) and Black and Dlugosz (n=318), though both sets of authors have more complete coverage within their time periods of interest.[5] Critically, the larger sample in this study allows for a more comprehensive documentation of electoral conditions, particularly with respect to variation across Reserve Banks.

Table 4.1: Director Election Ballot Sample

District	Bank	Years Covered	Num Contests	Num Candidates
1	Boston	1987-2015	62	63
2	New York	1980-2015	83	90
3	Philadelphia	2001-2015	20	21
4	Cleveland	1980-2013	73	88
5	Richmond	1980-2015	72	73
6	Atlanta	NA	NA	NA
7	Chicago	1988-2015	41	47
8	St. Louis	1980-2010	64	101
9	Minneapolis	1987-2015	46	51
10	Kansas City	1992-2015	51	77
11	Dallas	1980-2014	75	115
12	San Francisco	2009-2015	14	19

Note: The table describes the sample of director election ballots collected. In total, there are 601 contests, involving 745 candidates, between 1980 and 2015. Ballots were obtained for all but one Reserve Bank, Atlanta. I have the most complete election coverage for the New York, Richmond, and Dallas Feds, and the least coverage for the Philadelphia and San Francisco Feds.

The final data is a panel in which the unit of observation is a candidate-contest. A contest, or election, is defined by several dimensions: Reserve Bank (the Reserve district in which the election is held); director class (whether the open seat is Class A or Class B); time (year the election was held); and bank group eligible to vote (either Group 1, Group 2, or Group 3). A candidate is an individual nominated by member banks to run in a particular contest.

To construct variables, a pair of research assistants and I recorded three categories of information from each of the ballots. First, we collected and coded information on the election itself: the year it was held, whether the contest was for a Class A or Class B seat, the bank group eligible to participate in the election, the total number of member banks in the group eligible to participate in the election, and indicators denoting whether

4 The Atlanta Fed charged a fee of several hundred dollars to collect, digitize, and release their records. Records from the Philadelphia Fed for years prior to 2001 were only available to view in person. My request for pre-2009 ballots from the San Francisco Fed was still being evaluated by the legal department at the time of writing.

5 Some Reserve Banks prohibited researchers from sharing released records.

a nominating committee was used and whether the contest was a special election.[6] The second category of information recorded pertained to the candidates in each of the elections. In addition to the candidate's name, title, employer, and location, relevant details from the candidate's biographical sketch—e.g. education, business and banking interest group affiliations, and public service experience—were recorded. Thirdly, for each candidate competing in a contest, we recorded and tabulated the list of member banks that nominated them. As a final step, I supplemented candidates' biographical data with CF-scores (Bonica 2016) where possible and added indicator variables denoting whether a candidate was an incumbent and whether they won their race. Appendix 4.8.2 provides summary statistics for the variables used in the analyses below.

One drawback to relying on the election ballots is that missing data for individual years were not uncommon, either because the ballots were not retained by the Reserve Bank or were of poor scan quality. In total, about 5% of observations have incomplete data. While the data coverage is inconsistent and the resulting panel I construct unbalanced, the degree to which data is missing is unlikely to be a function of differences in Reserve Bank capacity or professionalism.[7] For this reason I am less concerned that missing data confounds the results from my analysis. Imputing the missing data, moreover, produces similar regression results as those presented below, though with larger standard errors for estimated coefficients.

A more substantive drawback to the data is that it does not shed light on other aspects of the electoral process that are of interest. I was unable to obtain data on bank turnout, for example, or on the margins of victory for winning candidates.[8] One consequence is that while I can measure election contestation (as a crude dummy variable or simple count of the number of candidates running in each contest), I do not have other measures of competitiveness that would be of interest.[9] At a minimum, however, the data I do have can illustrate the basic contours of the director selection process.

6 I count all member banks listed on the bank group's ballot as eligible to participate in the election unless the ballot explicitly notes the bank was ineligible.

7 Even if missingness were a function of Reserve Bank administrative capacity, it is not immediately clear that this would be correlated with director election characteristics. Moreover, given that most of the missing records are older, if it were the case the missingness resulted from Reserve Bank traits, it would likely reflect more on previous Reserve Bank staff's poor record keeping practices, rather than current Reserve Bank administrative capacity.

8 Suto (2018) obtained voter turnout for New York Fed director elections between 1915 and 1927. He finds member bank turnout between 37-96%. There does not appear to be a correlation between the number of candidates running and the turnout rate: for a Class A election in 1922, for example, 96% of eligible Group 1 banks voted even though the election was not contested. For a 1916 Class A election with two candidates running, 59% of eligible Group 1 banks voted.

9 Note that this data may be available in the future. At some Reserve Banks, a certificate of election that announces vote totals is circulated among member banks. None of the Reserve Banks I obtained data from had these records prepared or cleared for release, though some suggested they may be available at a later time.

4.4 The Electoral Landscape

To learn more about the electoral landscape, this section provides a detailed descriptive analysis of the election data at the contest and candidate levels. I also describe the population of member banks eligible to nominate candidates and vote in director elections.

4.4.1 Contests

Figure 4.1 plots the rates at which director elections are contested—that is, if more than one candidate is running in an election—across all contests in the sample, as well as broken out by director class and by Reserve Bank. The general picture is of low contestation: overall, 17.5% of elections in the sample had more than one candidate running, with the remaining 82.5% of elections featuring one unopposed candidate. These rates are consistent with those documented by Adams (2017) and Bopp (1937), who found 80.2% and 73.3% of elections unopposed in their respective samples. On average, 1.2 candidates ran in each election in my sample. I find Class A elections are contested at a significantly higher rate than Class B elections, again mirroring trends identified by Adams and Bopp. Roughly 28% of Class A contests featured more than one candidate compared to 7% of Class B contests. Across Reserve Banks, director elections are most frequently contested—roughly 40% of the time—at the St. Louis Fed, followed closely by Dallas and Kansas City. In contrast, elections are very rarely contested at the Richmond and Philadelphia Feds. Only 1% of elections at each of those Banks had more than one candidate running.

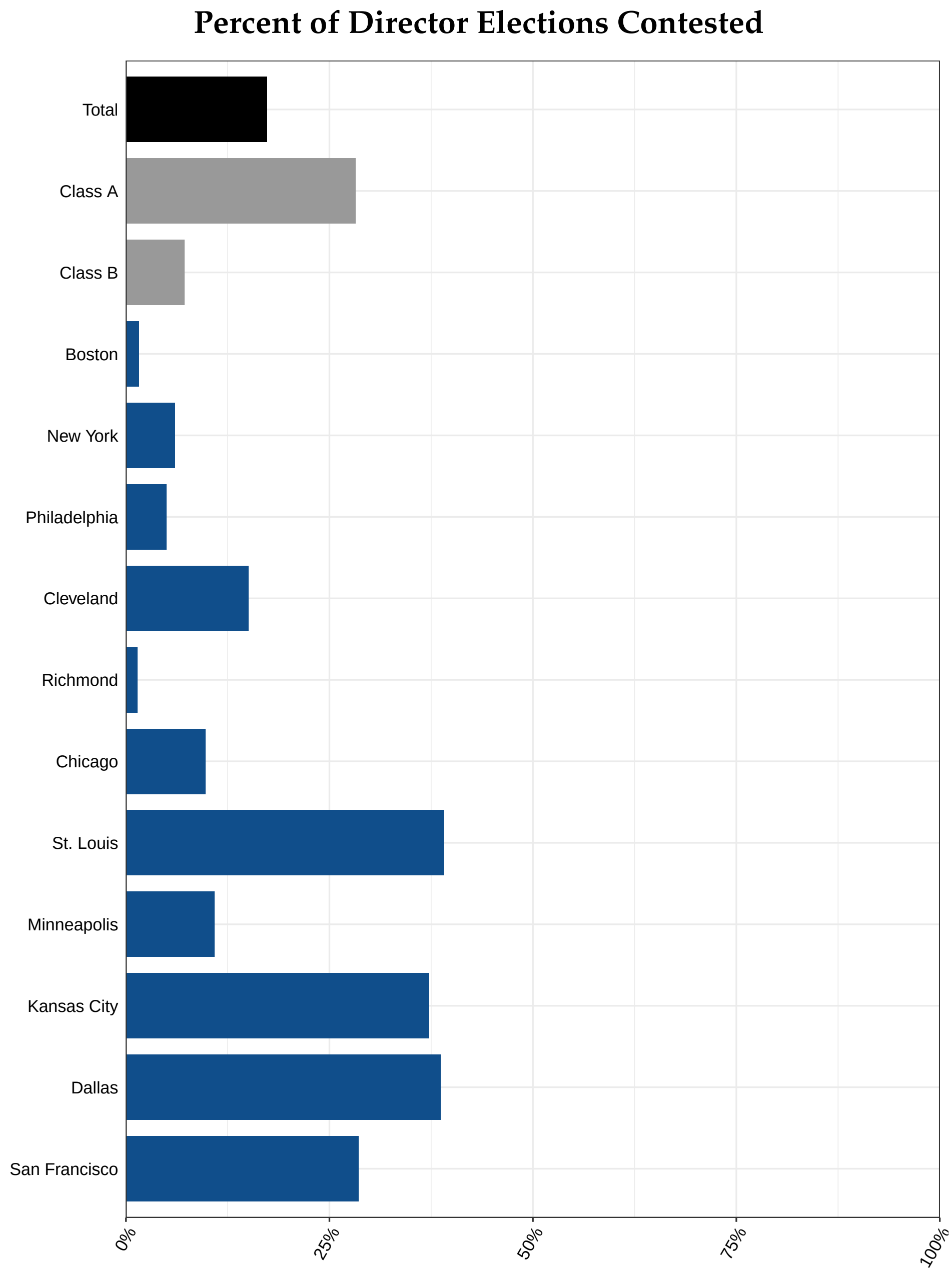


Figure 4.1: This chart plots the contestation rates for all elections in the sample and for elections broken out by director class and Reserve Bank. The rate of contestation in director elections is low overall, though there is variation across class and Reserve Bank.

Disaggregating elections by class highlights further variation in contestation across Reserve Banks. As Figure 4.2 shows, Class B elections are significantly less likely to be contested than Class A elections in every Reserve district. In fact, six of the eleven Reserve Banks in the sample did not have any contested Class B elections. By contrast, Class A elections were contested more than half of the time in four Reserve Banks; in Dallas, 64% of Class A elections were contested.

Election Contestation Across Reserve Banks, by Class

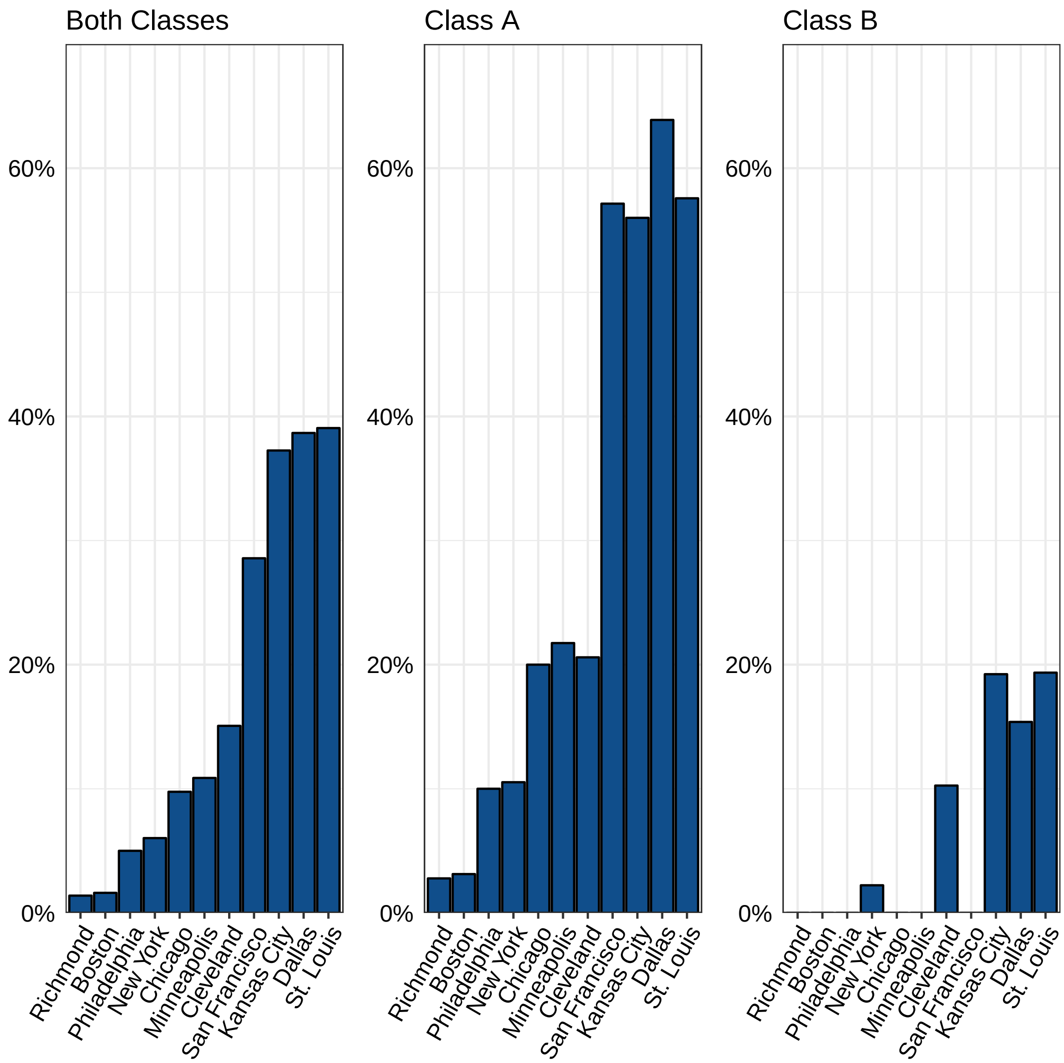


Figure 4.2: This chart compares Class A and Class B election contestation across Reserve Banks. More than half of Reserve Banks in the sample did not have any instances of contested Class B elections. Class A elections were much more likely to be contested, with contestation rates above 50% in four of the Reserve Banks.

Contestation also varies according to the size of the banks participating in the election. For both Class A and Class B seats, Group 1 elections—in which the largest member banks in a Reserve district nominate and vote for directors—are the least contested. Group 3 elections, featuring the smallest banks, are the most likely to be contested. This tracks with the number of banks eligible to participate in each group. On average, about 156 banks were eligible to nominate and vote in Group 3 elections, compared to 94 in Group 2 and 32 in Group 1.

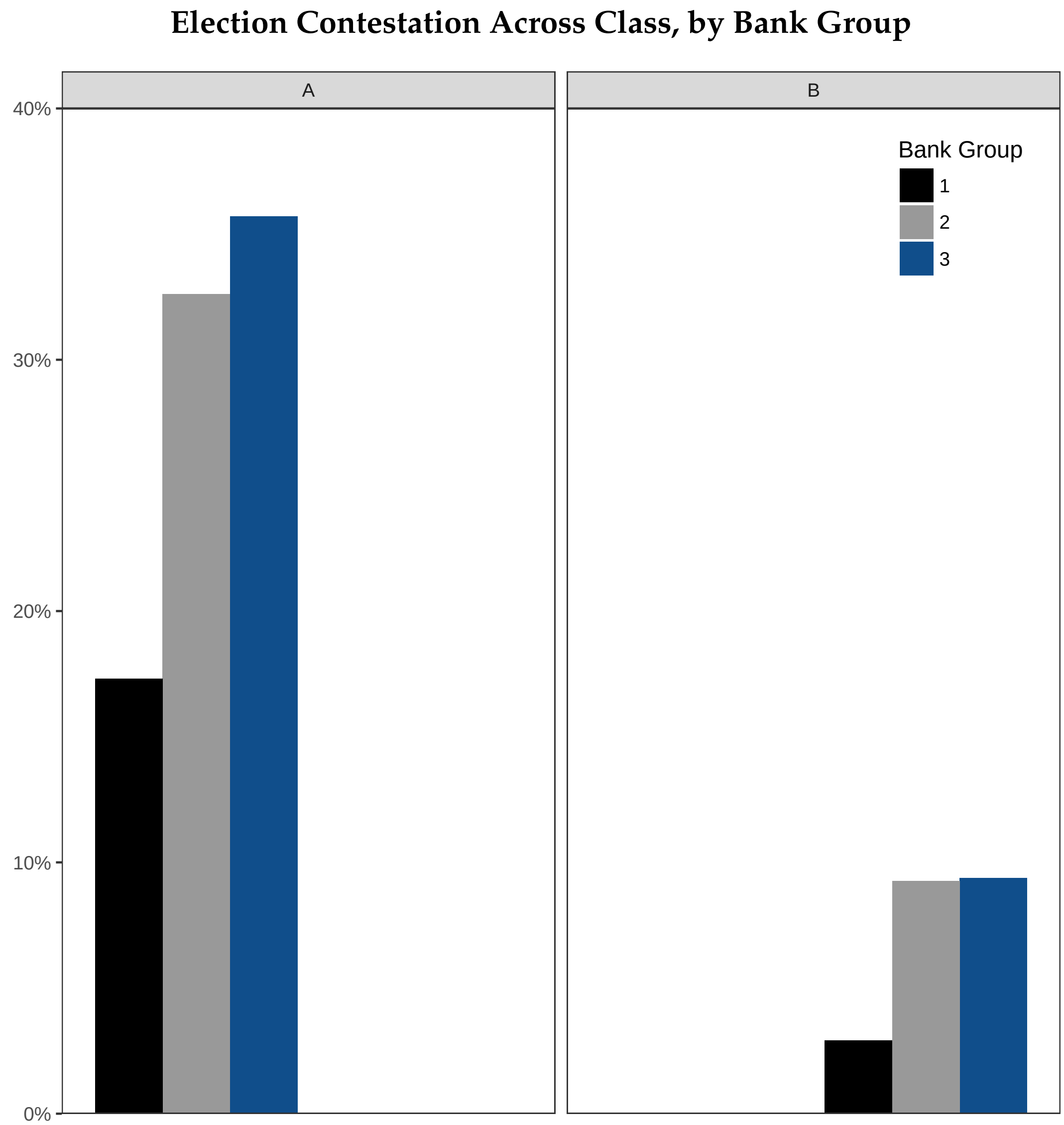


Figure 4.3: This chart compares election contestation rates across bank group. Group 1 banks, composing the largest member banks in each Reserve district, had the fewest contested elections. Group 3 banks, featuring the smallest banks, had the highest rate of contestation.

Beyond contestation, director elections vary in other ways. Table 4.2 provides a summary of contest characteristics for the whole sample and broken out by director class and Reserve Bank. Special elections to fill unexpired director terms are more common for Class B elections in the sample. The Boston and New York Feds have the highest special election rates while the Richmond and San Francisco Feds did not hold any. Overall, about 8% of elections in the sample were special elections.

Consistent with Adams (2017), I find about 17% of contests involved the participation of a nomination committee.[10] While the majority of Reserve Banks in the sample never

[10] In Adams (2017), the Atlanta Fed uses a nominating committee for most of its contests. Including

Table 4.2: Summary of Contest Characteristics

	Num Contests	Mean Cands	Pct Class A	Pct Special Elec	Pct Nom Cmte
Total	601	1.2	48.9	7.7	17.3
Class A	294	1.4	100.0	4.8	18.7
Class B	307	1.1	0.0	10.4	16.0
Boston	62	1.0	51.6	17.7	93.5
New York	83	1.1	45.8	14.5	45.8
Philadelphia	20	1.1	50.0	10.0	0.0
Cleveland	73	1.2	46.6	5.5	5.5
Richmond	72	1.0	50.0	0.0	2.8
Chicago	41	1.2	48.8	9.8	0.0
St. Louis	64	1.6	51.6	4.7	0.0
Minneapolis	46	1.1	50.0	4.3	4.3
Kansas City	51	1.5	49.0	5.9	0.0
Dallas	75	1.5	48.0	6.7	0.0
San Francisco	14	1.4	50.0	0.0	0.0

Note: The table provides a summary of director election characteristics for all contests in the sample and broken out by class and Reserve Bank. Reflecting the fairly low rates of election contestation, the average number of candidates running in each election falls between 1.0 and 1.6 across Reserve Banks. As expected, roughly half of all elections in the sample are Class A. Overall, nearly 8% of contests were special elections called to fill a director's unexpired term. About 17% of contests in the sample employed a nominating committee that recommended candidates for member banks to nominate.

used a nominating committee, the Boston Fed used one in nearly all of its elections over this period. Nominating committees appear to be quite effective at structuring competition on ballot. Of the 104 contests that involved a committee, all but five of those elections (4.8%) were uncontested–a significantly lower rate of contestation than elections that did not use a nominating committee (20%). Moreover, in those five contested elections (all Class A), the candidates promoted by the nomination committee won every time.[11].

4.4.2 Member Bank Nominations

Across the sample, member banks submitted 3,922 nominations in total, about six per candidate on average. The modal candidate received 1 nomination. The distribution of nominations candidates received are similar across incumbency status, director class, Reserve Bank, and bank group.

The share of member banks that was eligible to participate in an upcoming election and submitted a candidate for nomination—the nomination participation rate—has remained relatively steady over time, averaging 12.6% across elections (Figure 4.4). Though small sample sizes within year inhibit a more disaggregated temporal analysis, breaking out the nomination participation trend by bank group suggests some of the underlying dynamics. Big banks (those in Group 1), while having the highest nomination participation rates relative to small and medium-sized banks, have become much less active in nominating director candidates over this time period. Conversely, the nomination participation rate of the smallest banks (those in Group 3) has increased slightly over time. This is even as the number of Group 3 banks eligible to participate in elections fell dramatically over this period due to bank consolidation.[12]

Atlanta in my sample would presumably increase the 17% share I observe.

11 This is also consistent with a 1976 survey which found that among the five Reserve Banks that used nomination committees, there were no instances of member banks rejecting the banking associations' recommended nominee (U.S. House 1976)

12 In 1985, there were over 14,000 commercial banks in the U.S. In 2015, that number fell to 5,500. The dramatic decline in the number of banks over this period is consistent with the general downward trend observed since the 1970s, following the growth of branch banking and the acquisition of small community banks by larger institutions. See McCord, Prescott and Sablik (2015).

Member Bank Participation in the Nomination Process, 1980-2015

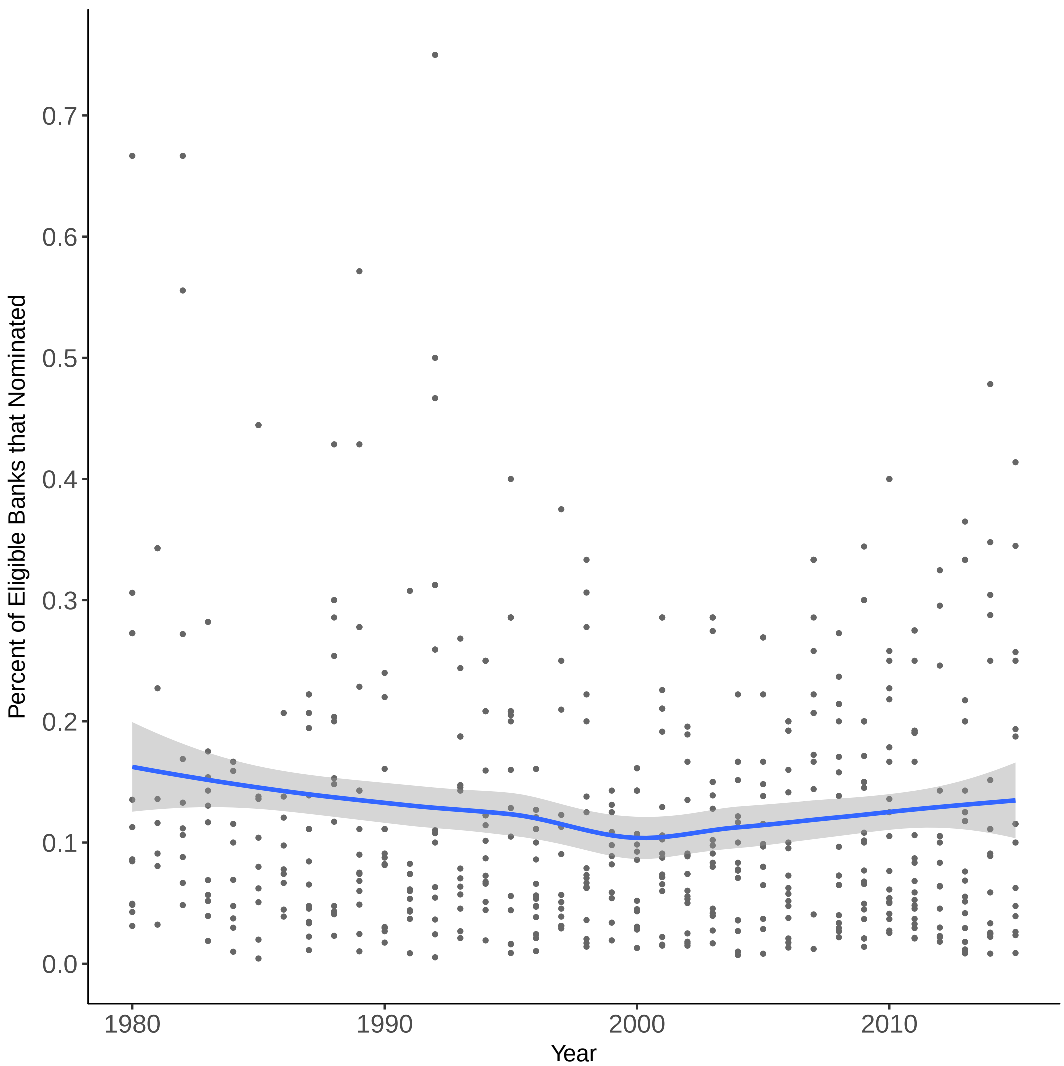


Figure 4.4: This chart presents the number of candidate nominations submitted by member banks for an upcoming election as a share of all member banks eligible to nominate and vote in that election. The blue line is a loess smoother; gray shading represents standard error bounds. This nomination participation rate has remained fairly steady over time. Over this 35-year period, an average of 12.6% of eligible banks nominated a candidate in an election.

Looking beyond the time trend, Figure 4.5 below presents aggregated nomination participation rates across several key dimensions. The first panel shows member bank participation rates (the number of candidate nominations submitted as a fraction of all member banks eligible to submit a nomination) in the director nomination process, across Reserve Banks. Member banks in the Philadelphia and Boston Feds are the most active nominators in the sample. In Philadelphia, nearly a quarter of eligible member banks in each election nominated a candidate. The Chicago and Kansas City Feds, by contrast, have the least active member banks. In Chicago, less than 4% of member banks in each election, on average, took advantage of the open nomination process and submitted a name for the ballot. There does not appear to be a correlation between the share of races contested and the member bank participation rate within districts.

Member Bank Participation Rates in Nomination Process, by Bank, Bank Group, and Class

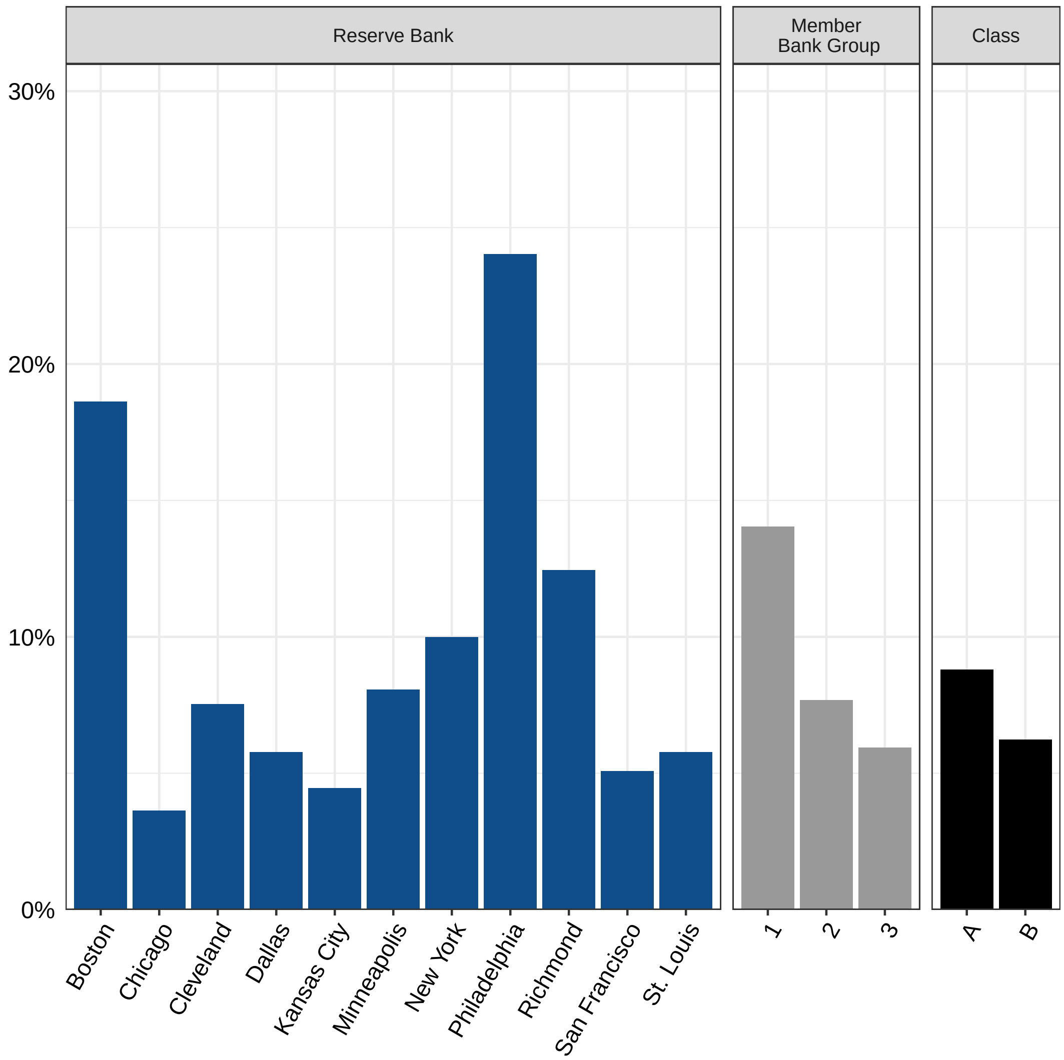


Figure 4.5: This chart presents the number of candidate nominations submitted by member banks for an upcoming election as a share of all member banks eligible to nominate and vote in that election, broken out across Reserve Banks, member bank groups, and director class. Member bank participation in the nomination process varies across each of these dimensions.

The second panel of Figure 4.5 breaks down nomination participation rates by member bank group. On average, Group 1—composed of the largest banks within each Reserve district, each year—had 32 member banks eligible to participate in each election. Group 2 and Group 3 consisted of 94 and 156 member banks, respectively. Participation in the nomination process is inversely related to bank size. About 15% of Group 1 member banks submitted candidate nominations for an upcoming election compared to 8% for Group 2 banks and 6% for Group 3 banks.

Lastly, as the third panel shows, member banks are more active in the nomination process for Class A elections than in Class B elections. The average Class A contest received candidate nominations from eight banks compared to six member bank nominations in the average Class B contest. Class A candidates are also much more likely to be affiliated with at least one of their nominators, unsurprising given that Class A candidates are employed by banks. Over three-quarters of Class A candidates were affiliated with at least one of their nominators, compared to 6% of Class B candidates.

While I do not analyze the identities of the nominating banks, a cursory look suggests that some banks, particularly in Group 3, are active, repeat nominators that submit names nearly every year they are in the sample. In most cases, however, member banks exercise their nomination authority just once. Interestingly, the biggest banks in the country are not active nominators. Bank of America only used its nomination authority twice between 1980 and 2015. Chase Manhattan submitted a nomination five times.

4.4.3 Candidates

Given that the vast majority of director candidates ultimately win their race, candidate biographical characteristics closely mirror the characteristics of elected directors described in the previous chapter. Candidates are overwhelmingly male—88%, slightly higher than the share among the sample of elected directors—and employed in the banking or commerce sectors. About 20% of candidates have an MBA. Roughly 28% listed an affiliation with the state or national chapters of the ABA (among Class A candidates the share is nearly 50%), about the same share that listed affiliation with the Chamber of Commerce. Nearly 14% and 5% of candidates listed an affiliation with the Independent Community Bankers of America (ICBA) and Business Roundtable, respectively. About 17% reported previous government experience on their ballot biography. The average CFscore for candidates is 0.35, slightly higher than the average among my sample of elected directors.

When compared across groups, candidates running in director elections have fairly homogeneous characteristics. Figure 4.6 displays the proportion of unique candidates, broken out by bank group, with selected professional characteristics as reported in their ballot biographies.[13] All candidates, including those running in more than one election, are included once. Bars represent 95% confidence intervals. While large (Group 1), medium (Group 2), and small (Group 3) bank elections feature candidates employed in similar occupational sectors, large bank elections have a higher share of candidates with MBAs and membership in the Business Roundtable. Small and medium bank elections feature higher shares of candidates that are members of the major banking organizations:

[13] As the vast majority of candidates ultimately win their election, breaking out candidate biographies by class mirrors the analysis of director biographies presented in Chapter 3.

ABA and, particularly for smaller banks, ICBA. Differences across bank groups are quite modest overall, however.

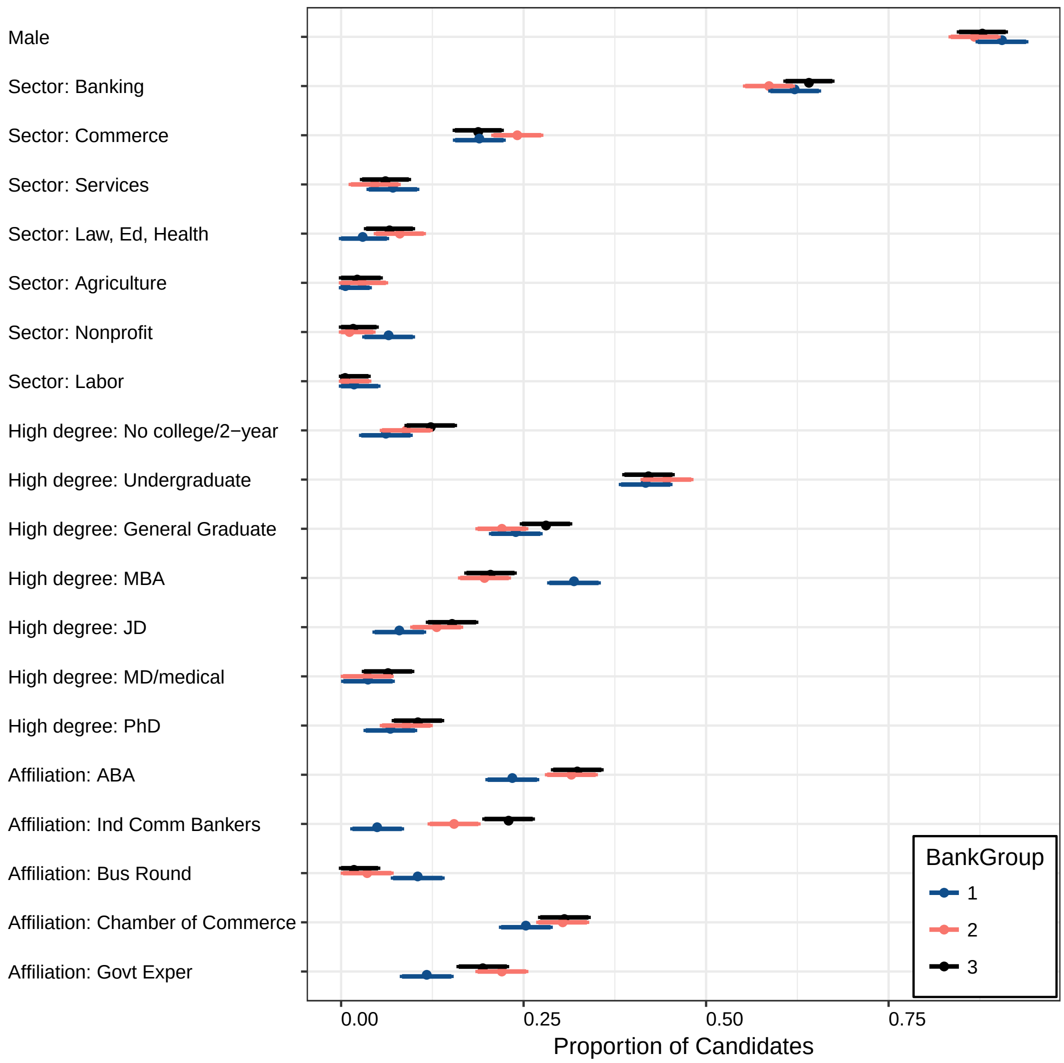


Figure 4.6: Candidates' Professional Attributes, by Bank Group. This graph shows the proportion of unique candidates, broken out by bank group, with selected professional attributes. Bars denote 95% confidence intervals. Large (Group 1), medium (Group 2), and small (Group 3) elections feature relatively similar candidates, though there are slight difference in interest group membership and educational attainment.

Figure 4.7 further breaks out candidates according to whether they won or lost their election. As above, winners and losers share similar biographical profiles with few differences between them. For Class A candidates, none of the biographical traits appear to differ between those who won and those who lost. Among Class B candidates, winners are slightly more likely to have PhDs and MBAs. Curiously, winners are less likely to have reported membership in the Chamber of Commerce than losers. Overall, however, winners and losers in both Class A and B elections have similar biographical profiles.

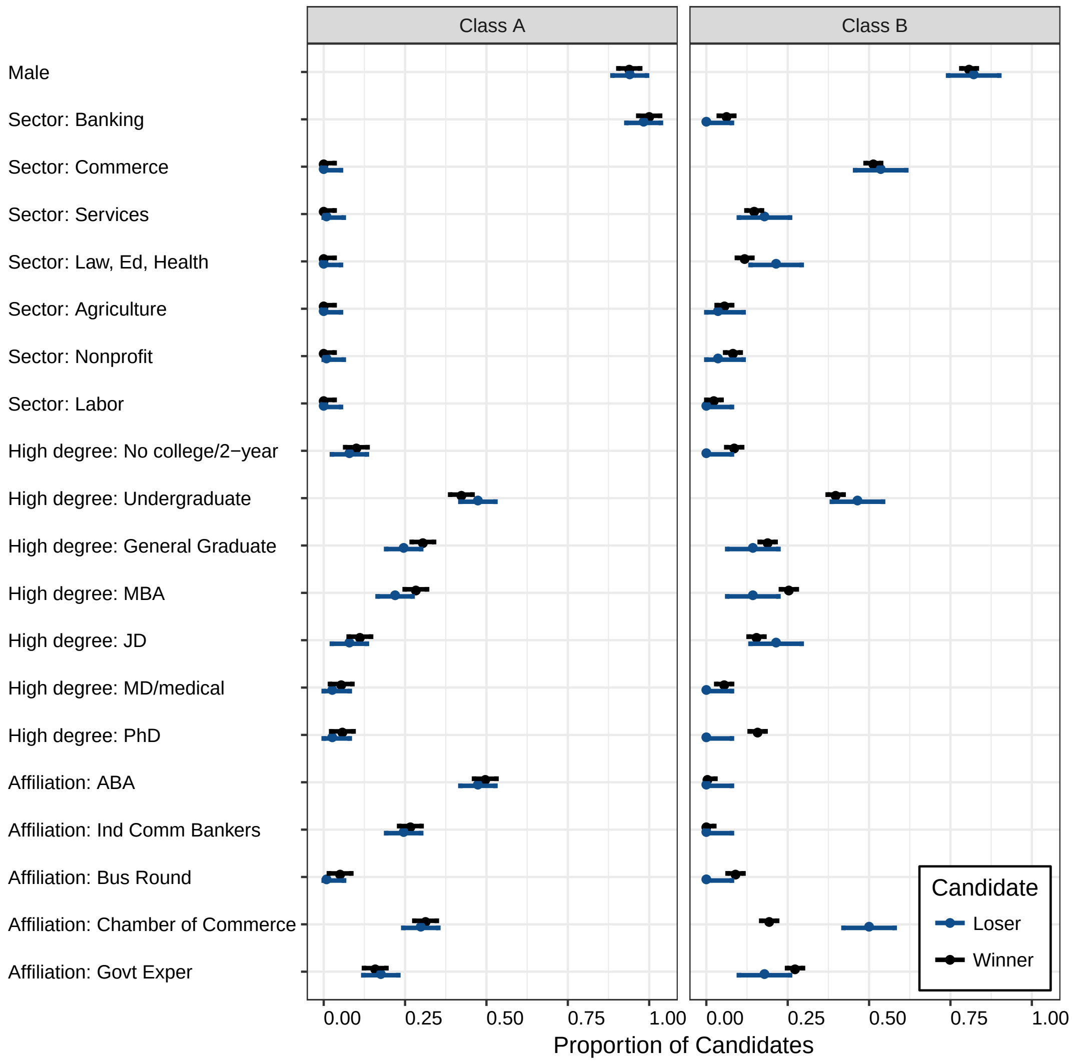


Figure 4.7: Candidates' Professional Attributes, Winners vs. Losers. This graph compares professional attributes among winning and losing candidates. Bars denote 95% confidence intervals. Winners and losers do not exhibit significant differences.

Examining winners in contested and uncontested elections, however, suggests some differences between candidates. Figure 4.8 examines selected attributes of winning candidates according to whether the winner ran in an uncontested or contested race, within class. Contested Class A winners have higher rates of membership in some of the key interest groups (ABA, ICBA, and Chamber of Commerce) than uncontested Class A winners. Among Class B winners, those winning contested races had higher rates of affiliation with the Chamber of Commerce and were more likely to come from the agricultural sector, have a PhD, and be male.

In addition to the characteristics displayed in Figure 4.8, there are also differences in candidates' political ideology. As a group, winners of contested races are significantly more conservative than uncontested winners (p¡0.001), with a mean CFscore more than half a standard deviation greater than uncontested winners. The difference is starkest among Class B winners: the mean CFscore for contested winners is 0.62 compared to 0.12 for uncontested winners. While these patterns do not clearly suggest that contested winners are of higher "quality" than unopposed winners, they raise the possibility that when voting banks have more than one candidate to consider, certain candidate characteristics, like interest group affiliation, are relevant to their vote choice. I examine contested elections more directly in the following section.

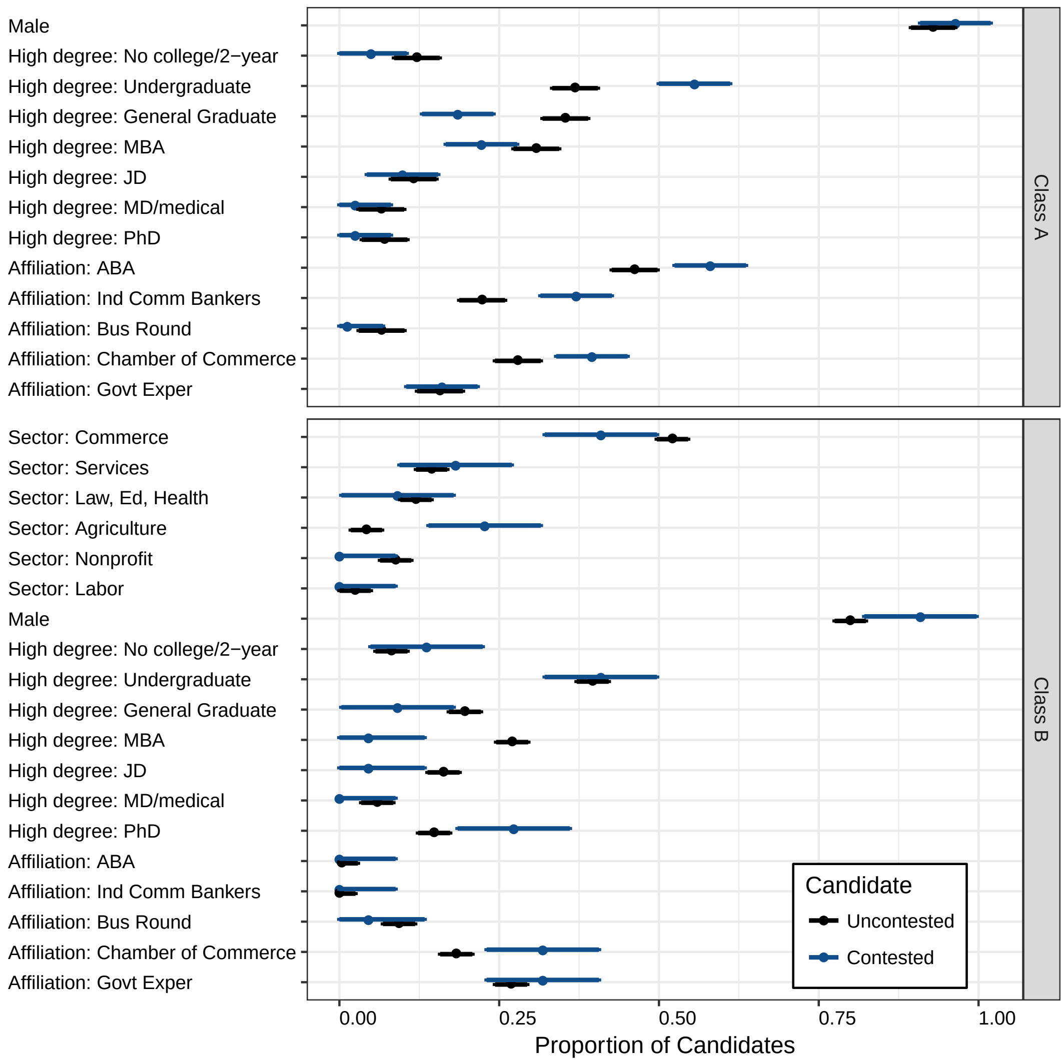


Figure 4.8: Winners' Professional Attributes, By Contestation. This graph compares selected professional attributes of election winners in contested and uncontested races. Bars denote 95% confidence intervals. Within each director class, contested and uncontested winners differ in some respects. A larger proportion of Class A contested winners have membership in key financial interest groups than Class A winners from uncontested races. Among Class B races, contested winners are more likely to work in agriculture, more likely to have a PhD, and more likely to affiliated with the Chamber of Commerce than uncontested winners.

4.5 Who Wins Director Elections?

In this section, I dig deeper into contested elections to determine which factors predict candidate victory, conditional on a candidate's decision to run. While many factors, both relating to the candidate and the electoral environment, influence election victory, I focus here on features at the candidate level.[14]

4.5.1 Theory

Director election ballots include brief (roughly one-half page) biographies of the candidates running for an open seat. Given the size of the Reserve Bank districts and the absence of campaigning in this electoral context, member banks likely have little knowledge or information about candidates before they vote. Biographies that describe candidates' backgrounds may thus be especially useful sources of information. Studies of state and local elections document an assortment of candidate features—including profession and education credentials—that affect voters' perceptions of candidate quality and the likelihood of winning (see Bibby and Holbrook 2004). As the previous section showed, however, candidate biographies are fairly homogeneous. Moreover, since candidates in a contest are essentially matched on profession and the size of their employer—Class A, Group 1 contests, for example, will only have candidates that work for big banks—homogeneity in candidate attributes will be even more pronounced.[15]

Consequently, member banks may be more sensitive to other pieces of information that are more likely to vary across candidates and may better signal a candidate's desirability. In particular, I focus on incumbency and the number of nominations a candidate receives. I posit that each of these factors are associated with a greater likelihood that a candidate wins their (contested) election.

The local politics literature provides support for these hypotheses. In city council elections, for example, incumbency is associated with a large electoral advantage, significantly increasing the incumbent candidate's probability of winning and their vote share (Trounstine 2011; Krebs 1998). Endorsements from local media and political organizations are also associated with victory in local races (Krebs 1998; Davidson and Fraga 1988; Cohen et al. 2008). While media and political parties do not play a role in director elections, nominations a candidate receives from member banks may be interpreted by other banks as endorsements. Given that these are relatively low information environments, a longer list of nominations may be a strong signal of a candidate's popularity or quality.

In addition to incumbency and endorsements, I also evaluate the possibility that political ideology matters in director elections. Though I am skeptical this is the case—only a handful of biographies in the sample reported information that directly revealed or alluded to a candidate's partisanship or ideology—it is possible that voting banks are selecting on some sense of perceived ideology that is unobserved. Indeed, the local politics literature finds evidence of partisan and ideological voting even in nonpartisan elections (Bonneau and Cann 2015; Squire and Smith 1988).

14 Adams (2017), for instance, models the likelihood of electoral victory as a function of the institutional characteristics of the candidate's employer, including assets held and reputation. Electoral contestation more broadly, of course, is shaped by a host of other institutional factors, e.g. expected voter turnout and voter knowledge, which I do not account for in this analysis.

15 Note that Adams (2017), however, finds the larger the candidate's firm, the greater the likelihood they win election. Firm size may thus be a relevant consideration for voting banks even within bank group. Future work should consider both candidate-level and firm-level characteristics.

4.5.2 Empirical Model

I estimate the following logit model using the subset of candidates running in contested races:[16]

$$logit(winrace_{ij}) = \alpha_{ij} + \beta_{ij}(male) + \beta_{ij}(highdegree) + \beta_{ij}(aba) + \beta_{ij}(icba) + \beta_{ij}(chamber) \\ + \beta_{ij}(affilnom) + \beta_{ij}(incumbent) + \beta_{ij}i(numbernoms) + \beta_{ij}(cfscore) + \epsilon_{ij}$$

where $winrace_{ij}$ denotes whether a candidate i won a contested election j. *incumbent* is a dummy variable equal to 1 if the candidate is running as an incumbent. *male* is equal to 1 if the candidate is male. *highdegree* is a three-level factor with undergraduate education as the baseline and MBA and other graduate degree as the other two levels. *aba*, *icba*, and *chamber* are dummies equal to 1 if the candidate listed an affiliation with any national or local chapters of the organization. $affilnom$ is a binary variable equal to 1 if the candidate is an employee, board member, or other affiliate of a member bank that nominated them. *numbernom* is a continuous variable counting the number of nominations the candidate received; measuring this as a share of all banks eligible to nominate produces similar results. As in the previous chapter, $cfscore$ denotes a left-right measure of political ideology. Robust standard errors are clustered at the Reserve Bank-level. I also estimate the baseline model with Reserve Bank fixed effects to account for time-invariant confounders across Reserve districts.[17] Results from models using samples subsetted by director class and bank group are reported in Appendix 4.8.4.[18]

4.5.3 Results

Figure 4.9 presents average marginal effects from the full-sample baseline and fixed effects models. Odds ratios are reported in Table 4.2 in Appendix 4.8.3. I highlight three takeaways. First, as foreshadowed in the descriptive analysis, candidates' professional characteristics and affiliations do not appear to predict the likelihood of winning director elections. The average marginal effects of candidate education and affiliation with bank and business interest groups are not significantly different from zero. Even for Class A candidates, listing an affiliation with the ABA does not increase the probability of winning a contested election; the average marginal effects estimated from both models are actually negative, though not statistically significant.

[16] Given the strong correlation between director class and candidate profession, I exclude profession measures from the model, though including them does not affect the results.

[17] The results presented below are also robust to including election year fixed effects.

[18] Because I have especially small cell counts for Class B races—there are no Class B incumbents in the sample who lost an election, for instance—I report results for Class A elections alone.

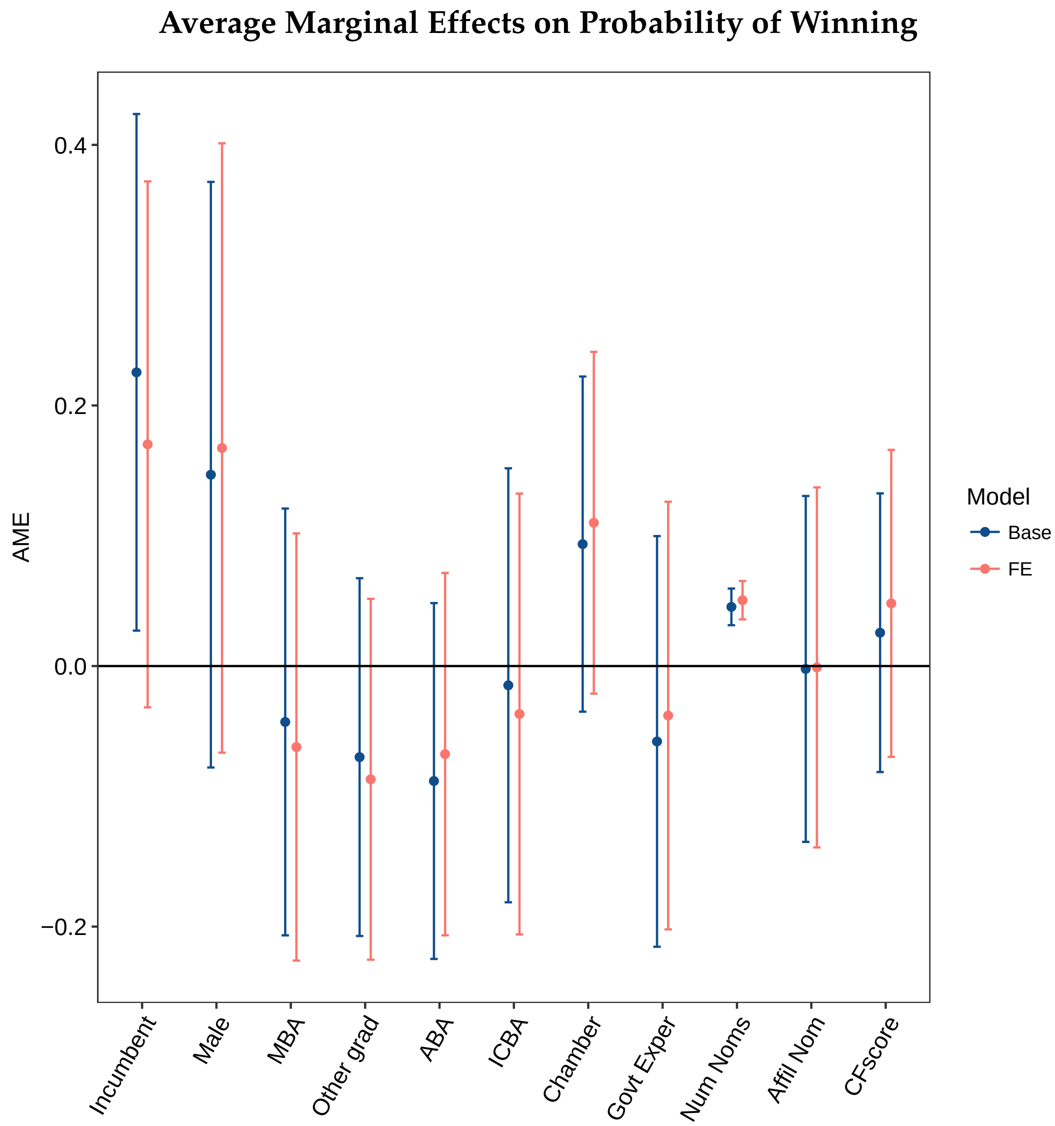


Figure 4.9: Average Marginal Effects, baseline and fixed effects models using contested races (n=249). The number of nominations a candidate receives is a consistent predictor of a candidate's probability of winning a contested director election.

Candidate political ideology also does not predict victory in these models. Though the previous chapter demonstrated that directors lean conservative, this is not because voting banks are choosing the more conservative candidate; rather, candidates are conservative from the start.

Second, I do not find strong evidence of an incumbency advantage in director elections. In the baseline model, incumbency increases the probability of a candidate winning by 25 percentage points on average. This effect is no longer statistically different from zero with the inclusion of Reserve district fixed effects, however, and is not significant in the subsetted Class A models presented in Appendix 4.8.4. While it may be the case that incumbency does not confer an electoral advantage in Reserve Bank director elections, the null result might also be explained by small cell counts that inhibit detection of any potential effects. Only 32 incumbents (15%) ran in contested elections; in all but five cases, the incumbent won. Of the 526 non-incumbents in the sample, 40% ran in contested elections. Together these results may hint at an incumbency advantage that primarily serves to deter nominations of other candidates.[19]

Lastly, I find that number of bank nominations a candidate receives is a significant and positive predictor of victory. Across the baseline and fixed effect models, a candidate's probability of winning a contested election increases by 3-6 percentage points on average for every additional nomination they receive. Figure 4.10 takes a closer look at the predicted probabilities of nominations on electoral victory. The probability of winning increases sharply as the number of nominations listed on a candidate's ballot biography increases. This trend holds for both incumbents and non-incumbents.

[19] When running the models on candidates in both contested and uncontested elections, I find a consistent and statistically significant 20 percentage point average marginal effect on the probability of winning an election.

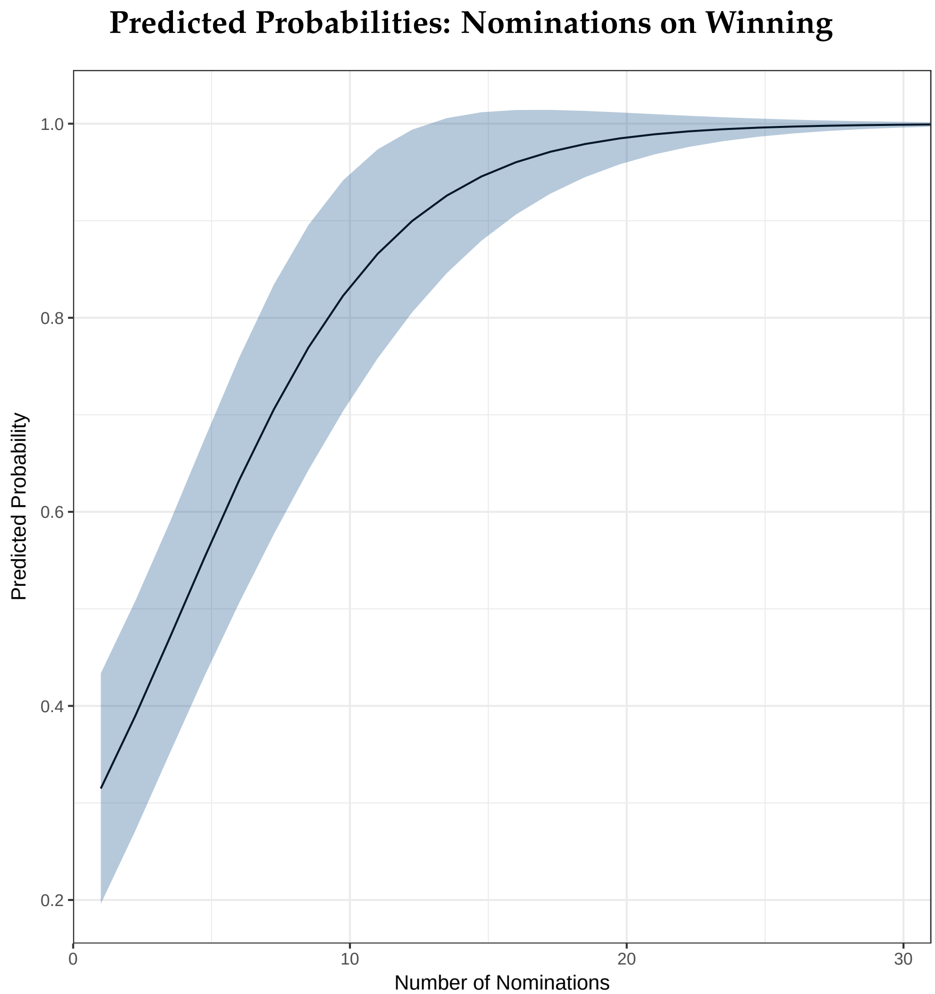


Figure 4.10: The probability of a candidate winning an elections increases sharply as the number of nominations they receive increases.

The marginal effect sizes are similar when running the models on Class A elections alone and on each of the three bank groups. The subsetted bank group models shown in Appendix 4.8.4, however, suggest there is variation in the marginal effect of nominations on the probability of winning, with Group 3 bank elections having an average marginal effect about one-third the size of the average effect for Group 1 and Group 2 bank elections (2 percentage points compared to 6 percentage points). Overall, these results suggest voting member banks view nominations as endorsements and use these endorsement to guide their voting behavior.

4.6 What Explains Contestation Variation?

A puzzle underlying the previous analyses is why director election contestation is so low in the first place. Reserve Bank directorships are presumably prestigious positions and, as recent studies have shown, they confer private monetary benefits to firms (Adams 2017;

Black and Dlugosz 2017). If firms stand to benefit tangibly and reputationally from these directorships, why are so few candidates nominated?

Barriers to entry, a common explanation for uncompetitive government elections (e.g. Abramowitz 1991; Ansolabehere and Gerber 1996), is unconvincing in this electoral context. The costs of running in director elections are quite low: any of the designated officers of the member banks eligible to participate in an election are free to nominate a candidate, even themselves. These costs are arguably even lower than in local election races (which require and campaign resources) and corporate board elections (where the nominations process is generally more restrictive). In Group 3 elections, where 155 member banks on average are eligible to participate in each election, it is difficult to imagine that high barriers to entry—whether administrative or financial—explain why we see only 1.3 candidates, rather than 100, running in each election. Moreover, given the homogeneity in director candidate characteristics and quality, a theory of electoral contestation centered on differences in ambition among potential candidates (see, for example, Lawless and Fox 2005) is also unpersuasive.

A more promising explanation comes from early accounts (Bopp 1935, 1937; Clark 1935) that point to local banking association control over the nomination process. As Bopp notes, "The conclusion is inescapable that somehow the word of some agency does get around to all of the nominating and electing member banks" (1935). Adams (2017), using whether a Class A candidate served on the national board of the ABA in the year of their nomination as a proxy for ABA influence, finds suggestive evidence in support of Bopp's theory.

While I find the low rates of contestation Bopp and Adams observe, as Section 4.4.1 shows, I also find considerable variation in contestation across Reserve Banks. In particular, when looking at Class A elections, contestation rates vary from less than 5% to more than 60%. A more thorough account of director elections, then, requires explaining not only low contestation overall, but the variation in contestation across Reserve districts. To that end, I conduct an exploratory analysis of election contestation. In addition to following Adams' evaluation Bopp's theory of banking association influence, I propose and test a simple theory of strategic entry in director elections. While a more thorough investigation into the determinants of director election contestation is beyond the scope of this paper, the exercise below aims to evaluate the promise of these theories as paths forward.

4.6.1 Theory

According to Bopp, director elections feature few candidates because local banking associations—primarily, the state chapters of the ABA—coordinate the nomination of a favored candidate. This coordination may be done semi-formally through their organization as a nominating committee or through back-channel means. It follows that differences in election contestation across Reserve Banks may be explained by variation in the strength of regional banking associations. Specifically, Reserve Banks with fewer contested elections may have banking associations in their district that are more active in local politics and more capable of exerting their power among member banks.[20]

A good measure of regional ABA strength would reflect each state banking association's organizational capacity, e.g. dollars spent lobbying, membership, or office staff levels. These organizational variables could account for how active the association is in local politics and proxy the likelihood that they are capable of providing the coordination mechanism Bopp posits. Though I was unable to obtain this data from the ABA chapters, for the purposes of this exploratory analysis, I measure ABA strength simply by whether a nominating committee recommended a candidate for a director election.

Beyond ABA strength, another factor that may influence director election contestation is the perception of Reserve Bank board influence. Even if we assume Reserve Bank directorships are generally valuable to firms, that contestation varies from year-to-year and across Reserve Banks suggests the possibility that a firm's interest in a director seat may be heightened in certain periods. One potential consideration for member banks deciding whether to submit a nomination may be whether the open director seat is expected to be especially valuable, such as when the Reserve Bank's presidency is vacant and the board of directors will exercise its authority to appoint a new president. The logic here is that when a Reserve Bank presidency is vacant, or is anticipated to be vacant in the near term, an open seat of the board of directors may be "pivotal" in the sense that the newly elected director will participate in the selection of a new Reserve Bank president. This opportunity to more directly influence the selection of the Reserve Bank's CEO may induce more member banks to submit a favored candidate for nomination.

4.6.2 Empirical Model

To evaluate the promise of these two theories, I estimate a simple OLS model:

$$numcands_j = \alpha_j + \beta_j(nomcommittee) + \beta_j(presvacancy) + \beta_j(specialelec) + \beta_j(incumbrun) + \epsilon_j$$

where $numcands_j$ is a continuous measure denoting the number of candidates running in a director election j.[21] *nomcommitee* is a binary indicator equal to 1 if a nominating committee (composed of state banking organizations in a Reserve district) circulated a recommendation for a candidate at the beginning of an election's nomination stage.[22] *presvacancy* is a binary variable equal to 1 if, at the beginning of the director election

[20] In particular, I propose that banking associations may be especially powerful in structuring the contestation of Class B elections. Because Class B candidates must not be formally affiliated with banks, bankers may have less familiarity with potential candidates and may therefore rely more on banking association recommendations. However, because there are no Class B races in my sample that featured a nomination committee and were contested, I cannot test this proposition with my data.

[21] Poisson and negative binomial models produce substantively similar results. Running separate nomination committee and presidency vacancy models also produce similar results, so I include the two independent variables of interest in one model for ease.

[22] Given that the nominating committee variable is highly correlated with Reserve districts—only certain Reserve Banks use nominating committees—I do not include Reserve Bank fixed effects in the model. For the same reason, I do not include regional and demographic variables that have been shown to explain contestation in local government elections, e.g. district size, racial diversity, and partisan balance (Gray 2004).

process, (1) the Reserve Bank's presidency was vacant, or anticipated to be vacant following a public announcement of the sitting president's intention to step down; and (2) the search for a new president is expected to begin after the start of the new director's term.[23] I also include *specialelec*, a dummy indicating whether the election was called to fill an unexpired term, and *incumbrun*, a dummy indicating whether an incumbent was running in the race. These variables have been found to inhibit contestation in local government elections (Gray 2004). I present results using the full sample of races and for Class A elections alone.

4.6.3 Results

Table 4.3 summarizes the OLS results for the exploratory contestation analysis. Consistent with Bopp, and with the descriptive analysis in Section 4.4.1, races with nomination committees are associated with fewer candidates running for election. The coefficient size for nominating committee in the full sample, moreover, is similar to that found in Adams (2017). For Class A elections, the effect size is larger. These results provide further evidence that nomination committees are effective at restraining member banks from submitting other candidates for nomination. In other words, when banking associations formally participate in the director nomination process, they succeed in getting their preferred candidate on the ballot and—in every case in my sample—elected.

I do not find evidence in support of the presidency vacancy theory, however. The coefficient is not statistically significant and it is also in the opposite direction we would expect if it were the case that having a Reserve Bank president vacancy encouraged more candidate nominations. From this simple model, then, I cannot conclude that the opportunity to sit on a "pivotal" board affects the number of candidates in a race.

Lastly, I find mixed results for the special election and incumbency variables. The incumbency effect is negative and statistically significant in the full sample but not distinguishable from zero in the Class A subset. The special election coefficient is negative and not significant in the full sample, but becomes positive and significant when looking at Class A elections alone. While the results could suggest the special election and incumbency variables help explain director election contestation, the results should be interpreted with caution given small cell counts (there are few contested special elections, for instance). At a minimum, future research should not discount incumbency and special elections as potential predictors of contestation.

4.7 Discussion

This chapter examined the electoral dynamics underlying the selection of Class A and Class B directors between 1980 and 2015. The analysis contributes to our understanding of the director election process by providing the most comprehensive description of the electoral landscape to date using the largest sample of elections collected so far. In doing

23 Sixty-two races in the sample were held with a Reserve Bank president vacancy.

Table 4.3: Effects of Nom Committee and Pres Vacancy on Contestation

	Dependent variable:	
	numcands	
	Full Sample	Class A Subset
	(1)	(2)
Nom Committee	-0.23^{***}	-0.42^{***}
	(0.06)	(0.11)
RB Pres Vacancy	-0.03	-0.11
	(0.08)	(0.13)
Special Elec	-0.01	0.44^{*}
	(0.09)	(0.20)
Incumb Running	-0.11^{*}	-0.07
	(0.05)	(0.09)
Constant	1.32^{***}	1.49^{***}
	(0.03)	(0.06)
Observations	601	294
Adjusted R^2	0.02	0.05
F Statistic	4.57^{**} (df = 596)	4.60^{**} (df = 289)

Note: Robust SEs. $^{*}p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$

so, I provide detailed insight into the contests, the identities of the candidates running, and the participation of member banks in the nomination process.

I show that while Reserve Bank director elections are rarely contested, contestation rates vary considerably across districts. Moreover, only a small fraction, about 13%, of member banks eligible to nominate a candidate utilize this opportunity. I also find that nominations appear to guide member banks' vote choice, where candidates with more nominations are significantly more likely to win contested elections. Who the candidate is appears to be less relevant to winning than the endorsements the candidate receives. Additionally, I find suggestive evidence that nomination committees successfully inhibit contestation. Consistent with early accounts of director elections, regional state banking associations do appear to control the nomination process.

Taken together, the results suggest that director elections are highly coordinated, with regional banking associations playing a significant role in structuring who gets on the ballot—both in terms of recommending a preferred nominee and deterring member banks from submitting other nominees. While I cannot observe banking associations' behavior directly, at a minimum the analysis underscores the idea that banking influence is most potently exercised *before* the election process. The real action, in other words, is in the nomination stage. One implication of this results is that the ideological distribution of directors is right-leaning not because member banks select the most conservative candidates, but because candidates are conservative to begin with. A cursory analysis suggests that, at least for Class A races, candidates are more conservative overall than the population of political donors employed in banking or finance, the general pool from which directors are pulled (Bonica 2014). Banking associations' control over the nomination process, then, may help explain the existence and perpetuation of the conservative governing apparatus documented in the previous chapter.

Future work should focus on how banking associations execute this coordination mechanism in the nomination stage. In particular, greater attention to measuring banking association influence—perhaps through interviews or other qualitative approaches—and its variation across Reserve districts could be especially valuable. A significant drawback to the analysis in the previous section is the inadequate proxy for ABA strength. The existence of a nomination committee is a clear signal that banking associations are participating in the nomination process, but it does not address a more fundamental question: why do some Reserve Banks use nomination committees and others do not? Investigating variation in regional banking association influence and how this may relate to adoption of nomination committees would help explain the variation in contestation rates I document. Moreover, examining how banking associations coordinate the nomination process informally, without organizing as a committee, could shed light on the range of tactics by which banking associations are able to take control of the nomination process. In addition to building off Bopp (1935), this research could integrate more contemporary, group-centered theories of election politics (Cohen et al. 2008; Bawn et. 2012), which posit that policy demanding groups (in this case, bansk) have an incentive to take control of and coordinate nomination processes.

Another extension of this study could explore the relationship between bank size and election dynamics. One finding from this analysis is that Group 3 (small) banks are less likely to submit nominations for director candidates relative to the participation rates of larger Group 1 and Group 2 banks. One potential explanation is that Group 3 elections—which have a larger number of eligible member banks—require and receive more coordination during the nomination stage given their numbers. While I do not find evidence that nomination committees are more frequently involved in Group 3 elections, more precise measures of banking association influence could provide better leverage to investigate this possibility. At the same time, I also find that Group 3 elections are more likely to be contested than Group 1 and Group 2 elections. This is perhaps unsurprising given that there are more eligible member banks in Group 3, but it runs counter to the notion that banking associations focus more intensely on coordinating Group 3 banks. An alternative explanation for the inverse relationship between nomination participation rates and bank size is that big (Group 1) banks perceive the stakes of director elections to be higher than smaller banks. Big banks may have more to gain from placing a preferred candidate on the board, and perhaps more to lose if not. We might therefore expect Group 1 banks to be more proactive about nominating candidates. A final potential explanation is that Group 1 banks may be more tightly networked than banks in other groups. As a result, Group 1 bankers may just have more information about who would be a good candidate for the director seat. Evaluating these and other competing explanations could be a fruitful path forward for understanding how different banks utilize director elections to ensure their policy preferences are represented on the board.

This study has a number of limitations. First, the data does not allow for a more thorough examination of time trends. This is in part due to the incompleteness of my sample, but also to the fact that in most years, only 24 director elections are held. Even though I make no attempts at causal inference and aim to provide primarily descriptive insight, inferring time trends from this small number of within-year observations is challenging. The rarity of some important election variables also complicates my ability to examine theoretically relevant relationships. For example, there are only five Class A incumbents that lost an election in my sample; among Class B incumbents, there are zero. The small cell counts make it difficult to test for incumbency advantage in the data.

Second, this analysis does not discuss other actors, beyond members banks and banking associations, that may play a role in director selection. Bopp (1935) notes that while the Boston Fed had an especially strong banking association that exerted control over the election process, a sitting Class A director in the Chicago Fed, "Mr. Reynolds," was influential in selecting candidates for nomination to their board. Reserve Bank presidents may also play a role in selecting directors in some districts (Bopp 1935; Clark 1935). A more contemporary example is found in former New York Fed President Bill Dudley. According to transcripts of meetings of the New York Fed's board of directors, Dudley presented the board with recommended candidates for open Class A and Class B seats. Directors then voted to endorse Dudley's candidates, which was then communicated to the state banking associations that composed the district's nomination committee.[24] Attention to other participants would provide further insight into the director selection process and contribute to our understanding of why electoral outcomes like contestation may vary across Reserve Banks.

24 The candidates recommended by Dudley, who were ultimately nominated by member banks and won uncontested, were Alphonso O'Neil-White, Paul P. Mello, Glenn Hutchins, and Terry Lundgren.

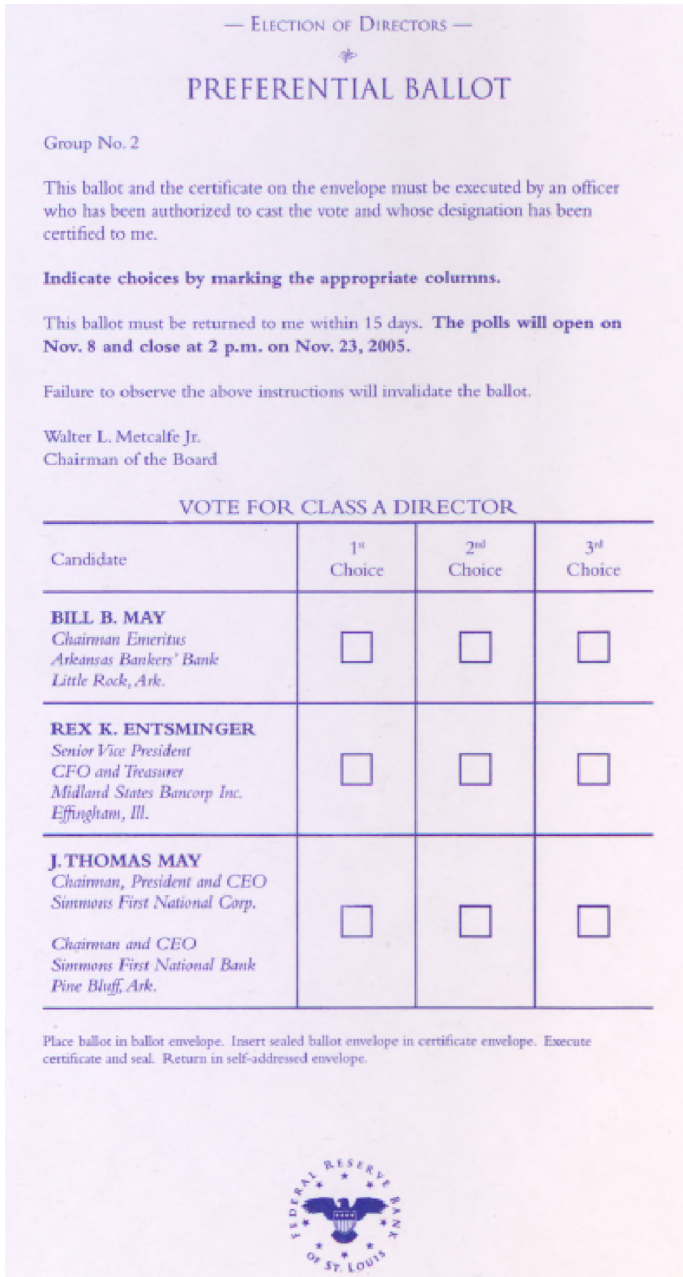
Lastly, while this analysis focused on director *elections*, there is still much to learn about the appointment of Class C directors by the Board of Governors. This is an even more opaque process than director elections, and I was unable to obtain relevant records from the Board through FOIA. However, evidence from the archival record suggests that, at least early in the Fed's history, the Board heavily relied on recommendations from Reserve Bank presidents, sitting Reserve Bank directors, and even other federal agencies.[25] Moreover, the Board of Governors appeared to prioritize the appointment of candidates who were "well-known" in the district's important industries; for example, the Board supported its selection of several Chicago Fed director candidates on the basis of their popularity in agricultural circles. More recently, Reserve Banks have developed their own strategies for identifying potential Class C directors for the Boards' consideration. The Cleveland Fed has an online recommendation form open to the public, while the Kansas City Fed maintains a "director pipeline program" to develop a pool of future Class C candidates. Future work should develop a more complete descriptive account of the Class C director selection process, which could allow more comprehensive theoretical work on director selection more generally.

In the next chapter, I attempt to fill in some of the gaps in our understanding of the director selection process, and director responsibilities more broadly, with a survey of former Reserve Bank directors.

[25] For instance, a candidate for the Cleveland Fed's board of directors in the late 1940s was recommended by a divisional director of the Agricultural Adjustment Administration. National Archives and Records Administration (Group 82, Box 993).

4.8 Appendix

4.8.1 Director Election Ballot



— ELECTION OF DIRECTORS —

PREFERENTIAL BALLOT

Group No. 2

This ballot and the certificate on the envelope must be executed by an officer who has been authorized to cast the vote and whose designation has been certified to me.

Indicate choices by marking the appropriate columns.

This ballot must be returned to me within 15 days. **The polls will open on Nov. 8 and close at 2 p.m. on Nov. 23, 2005.**

Failure to observe the above instructions will invalidate the ballot.

Walter L. Metcalfe Jr.
Chairman of the Board

VOTE FOR CLASS A DIRECTOR

Candidate	1st Choice	2nd Choice	3rd Choice
BILL B. MAY *Chairman Emeritus Arkansas Bankers' Bank Little Rock, Ark.*	☐	☐	☐
REX K. ENTSMINGER *Senior Vice President CFO and Treasurer Midland States Bancorp Inc. Effingham, Ill.*	☐	☐	☐
J. THOMAS MAY *Chairman, President and CEO Simmons First National Corp.* *Chairman and CEO Simmons First National Bank Pine Bluff, Ark.*	☐	☐	☐

Place ballot in ballot envelope. Insert sealed ballot envelope in certificate envelope. Execute certificate and seal. Return in self-addressed envelope.

Figure 4.11: Sample ballot, Federal Reserve Bank of St. Louis, 2005

4.8.2 Summary Statistics for Variables

Table 4.1: Variable Summary Statistics

Variable	N	Mean	St. Dev.	Min	Max
Incumbent	745	0.294	0.456	0	1
Male	745	0.881	0.325	0	1
Number of nominations	700	5.603	5.467	1	33
Affiliated with nominator	745	0.452	0.498	0	1
ABA affiliation	710	0.272	0.445	0	1
Community bank org affiliation	710	0.144	0.351	0	1
Chamber of Commerce affiliation	710	0.269	0.444	0	1
Bus Roundtable affiliation	710	0.058	0.233	0	1
Govt experience	710	0.208	0.406	0	1
CF score	648	0.338	0.734	−1.605	1.621

4.8.3 Regression Results: Who Wins Director Elections?

Table 4.2: Logit Output (Contested Elections), Odds Ratios

	Dependent variable:			
	winrace			
	Full Sample		Class A Subset	
	(1)	(2)	(3)	(4)
Incumbent	3.88*	2.76	2.61	1.80
	(0.65)	(0.68)	(0.65)	(0.67)
Male	2.59	3.18	2.59	4.67
	(0.70)	(0.71)	(0.95)	(0.91)
MBA	0.82	0.71	0.78	0.61
	(0.43)	(0.46)	(0.50)	(0.55)
Other Grad	0.69	0.58	0.71	0.54
	(0.42)	(0.45)	(0.52)	(0.64)
ABA	0.76	0.98	0.65	0.83
	(0.47)	(0.47)	(0.50)	(0.52)
ICBA	0.95	0.83	0.90	0.74
	(0.49)	(0.51)	(0.53)	(0.56)
Chamber	1.62	1.86	2.37	2.52
	(0.39)	(0.41)	(0.47)	(0.50)
Govt Exper	0.70	0.82	0.30	0.33
	(0.49)	(0.52)	(0.71)	(0.72)
Nom Affiliate	1.63	2.01	2.26	2.80
	(0.49)	(0.55)	(0.52)	(0.61)
Num Noms	1.30***	1.36***	1.40***	1.49***
	(0.07)	(0.08)	(0.07)	(0.08)
CFscore	1.10	1.41	0.96	1.28
	(0.31)	(0.33)	(0.36)	(0.40)
Constant	0.07**	0.003	0.05**	0.001
	(0.98)	(1.73)	(1.15)	(1.78)
Observations	193	193	153	153
Log Likelihood	−100.66	−98.27	−71.68	−68.61
RB Fixed Effects	No	Yes	No	Yes

Notes: Exponentiated coefficients. SEs in parentheses.
*p<0.05; **p<0.01; ***p<0.001

4.8.4 Average Marginal Effects: Who Wins Director Elections?

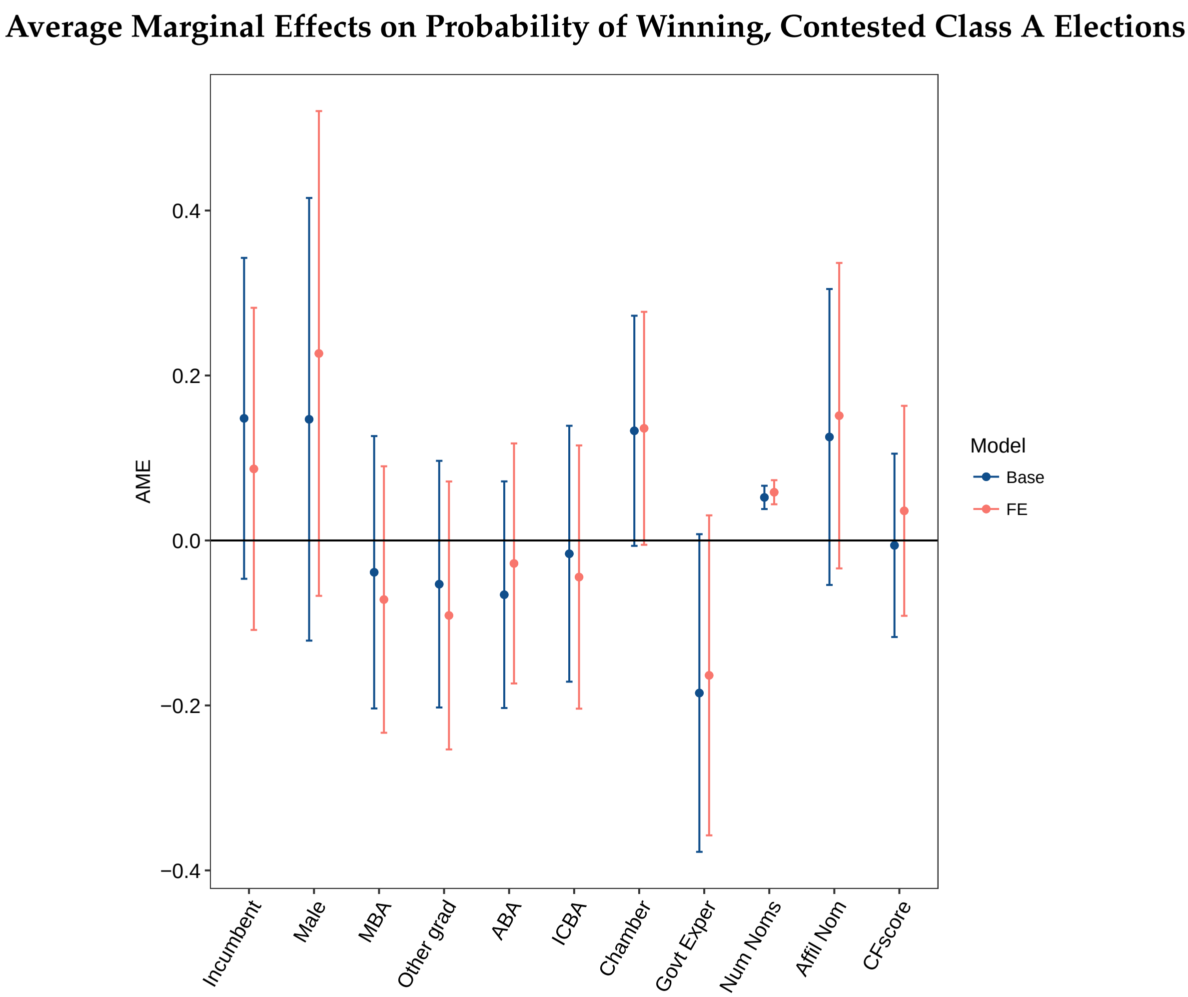


Figure 4.12: Average Marginal Effects, Contested Class A Elections. These results largely mirror the effects estimated on the full sample of contested elections.

Average Marginal Effects on Probability of Winning, by Bank Group

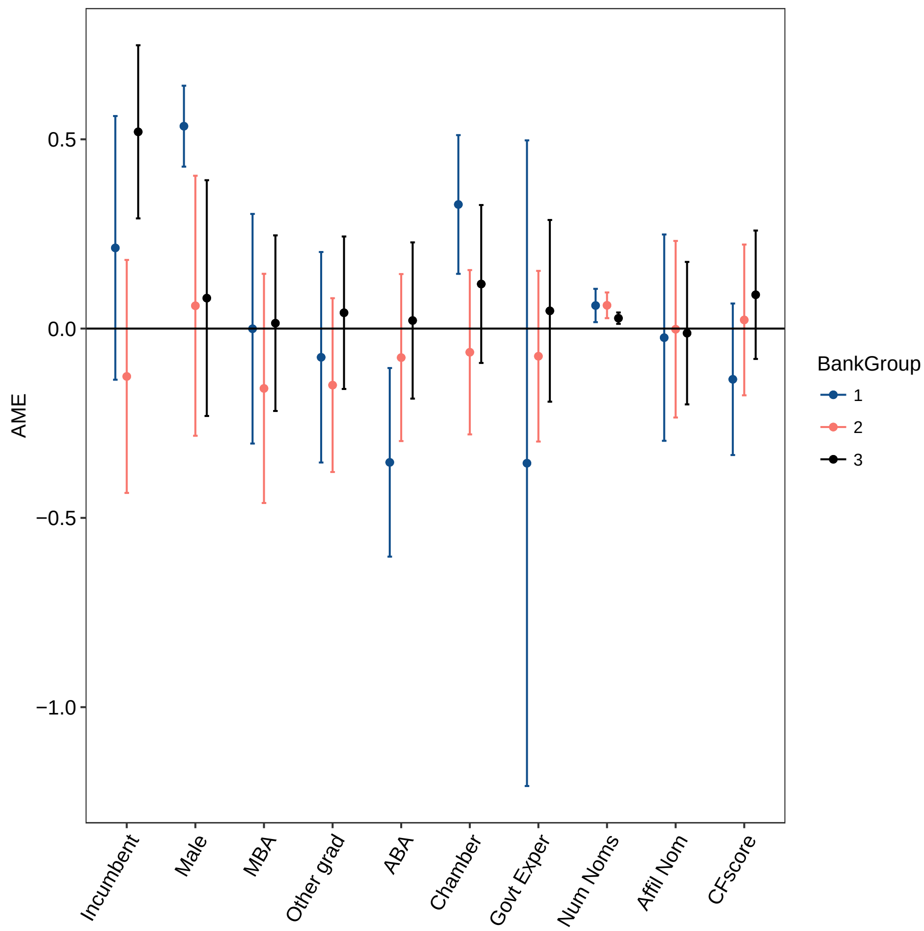


Figure 4.13: Average Marginal Effects, Contested Elections, by Bank Group, Baseline Model. Note that for some variables cell counts within group may be quite small, limiting the reliability of the results. Though these models should be interpreted with caution, for those variables that have sufficiently large counts (e.g. the number of nominations), they suggest there may be substantive differences in electoral dynamics across bank groups.

Chapter 5

National Survey of Reserve Bank Directors

> "They are, for the most part, men with a large amount of business experience and a broad point of view with respect to the public interest. They are an invaluable link between the Government and the business community. Because of them, the Government is better able to understand the point of view of business and business is better able to understand the point of view of Government." — Report of the Subcommittee on General Credit Control and Debt Management, Joint Committee on the Economic Report, 82nd Congress, 1952.

In the preceding chapters, I collected and analyzed data to describe observable outcomes of Reserve Bank governance dynamics. Chapter 3 documented the biographical profiles and ideological distributions of Reserve Bank directors and showed that directors tend to be conservative and relatively active (Republican) campaign donors. In Chapter 4, I investigated the electoral process that selects Class A and Class B directors and found suggestive evidence that local banking associations play a powerful role in controlling directors elections. While these empirical analyses are exploratory, they leverage original data to describe who sits on the Reserve Bank boards and how they got there.

In this chapter, I take a more qualitative approach and conduct a survey of former and sitting directors. By eliciting directors' first-hand accounts of their board service, I aim to develop a much more detailed and realistic picture of how Reserve Bank governance operates in practice. These descriptive accounts also allow me to validate the empirical trends documented in Chapters 3 and 4.

Surveys of political and economic elites have yielded important insights into elite policy preferences, how they influence the policymaking process, and the political landscapes in which they operate (e.g. Clinton et al. 2011; Oliver, Ha, and Callen 2012; Page, Bartels, and Seawright 2013; Anzia 2015). For the Fed in particular, interviews with FOMC members and staff have been instrumental in illuminating its decisionmaking procedures and interactions with Congress and the banking sector (e.g. Woolley 1984; Meltzer 2010; Schonhardt-Bailey 2013). Most closely related to this project, Harrison

(1977; 1991) surveyed about 100 directors in 1977 and again in 1989 for their attitudes regarding the Fed's independence and the influence of the Reserve Bank boards. He shows that across both surveys, directors considered their most important role to be the provision of on-the-ground intelligence about local economic conditions, but acknowledged that their input over monetary policy was limited. The survey I field takes a page from Harrison, updating and expanding the scope of this early work to build a more complete picture of what Reserve Bank directors do and how they are chosen.

To this end, I asked directors about a wide range of issues, including the director selection process, the scope of directors' responsibilities, Reserve Bank president appointments, and the tenor of board deliberations. The responses suggest that director recruitment processes are highly networked; that banking associations play active roles in selecting directors even in Reserve districts not known for using nomination committees; that directors perceive themselves to be influential in monetary policymaking; and that Reserve Bank presidents and staff largely dictate discount rate recommendations. More generally, the survey illustrates that director experiences vary considerably, even within the same Reserve Bank. While the sample is small and not entirely representative of the broader population of Reserve Bank directors, it nevertheless provides a new look into the dynamics of Reserve Bank governance and the viewpoints of directors themselves.

The primary contribution of the survey is informational. Specifically, the responses provide new descriptive insight—what Aberbach, Chesney, and Rockman (1975) call "descriptive theory." Without a clear sense of how elite institutions and processes operate, it is difficult to formulate precise expectations that may be analyzed formally or tested empirically. Less structured research methods, like informational surveys and interviews, can support the development of descriptive theory upon which more systematic studies can build. As I show here, respondents' views about the role directors play and the processes by which they are selected clarifies our understanding of how the Reserve Bank boards function and highlights inconsistencies between directors' views and the empirical and theoretical accounts I discuss in preceding chapters. Grappling with these inconsistencies may be a good starting point for future research on Reserve Bank governance.

The chapter proceeds as follows. In Section 5.1, I describe the online survey, the sampling frame, and the sample's representativeness. Section 5.2 walks through several categories of survey responses, including director selection, board responsibilities, the president appointment process, and discount rate policymaking. Section 5.3 concludes.

5.1 Data: National Survey of Reserve Bank Directors

The survey instrument consisted of roughly 40 questions and was designed to capture the full range of a director's experience while serving on a Reserve Bank board. In particular, I focused on questions about board operations, director recruitment, and directors' perceptions of their influence that I believed remained unanswered or under-explored in the academic literature and journalistic accounts. To that end, I asked former and sitting directors a series of questions that aimed to gather insight into: (1) how directors are recruited and which actors are most active in the recruitment process; (2) how much time directors devote to their responsibilities and how that time is split among different tasks;

(3) who directors consult in preparation for board meetings; (4) the kinds of policy issues on which directors are asked to advise; (5) how the Reserve Bank president appointment process works; and (6) the tenor of board meetings and the degree of conflict characterizing directors' deliberations. I also asked respondents about their partisanship and their preferences on regulatory and monetary policy.[1]

The survey was administered online via Qualtrics. Responses were confidential and participants were not required to provide any self-identifying information. Respondents also had the opportunity to skip questions and offer write-in responses to questions. Directors were initially contacted in late January and early February 2018 and given four weeks to complete the survey. Individuals that did not respond were sent four reminder messages over the following four weeks after making initial contact.

5.1.1 Sample Construction

To construct the sampling frame, I relied on the list of Reserve Bank directors compiled for Chapter 3 and focused on former and sitting (living) directors that began their board service no earlier than 1990 (n=522).[2] I restricted the sample in this way largely on grounds of convenience, as a large share of directors serving before 1990 are now deceased or in advanced age. To obtain email addresses, I conducted internet searches for each of the 522 individuals in the frame. In some cases this was a straightforward process because many directors are still employed and have email addresses listed through their employer's website. In other cases finding email addresses was more difficult, particularly for those individuals who are now retired. If I could not find a working email address, I conducted searches in LinkedIn and Facebook.

In total, I found working contact information for 343 former and current directors (about 66% of the sample) and invited this number to take the online survey. I emailed 267 directly and messaged 76 via LinkedIn.[3] Invites were fairly evenly balanced across the director classes, though fewer Class C directors were contacted compared to Class A and B directors. Invites were also roughly balanced across Reserve Banks, but directors from the Minneapolis Fed were slightly overrepresented (contact information was found for about 10 more directors at Minneapolis relative to the average). On average, about 28 former or sitting directors from each Reserve Bank were contacted.

Of the 343 former and sitting directors invited, 16 completed the survey—a response rate of about 4.7%.[4] The sample is obviously very small, complicating my ability to draw generalizable descriptions of director experiences. Moreover, as described below, the sample is not representative of the broader population of directors. This is a significant drawback given my interest in evaluating cross-district variation in board dynamics. Despite the clear limitations of this data, it is worth stressing that the survey responses are

1 As this survey was exploratory, I did not include manipulation or attention checks.

2 A total of 573 directors began their service on or later than 1990, but 51 of these directors had passed away by the time the survey was administered.

3 I emailed an additional 27 directors but received bounce-back messages from those addresses.

4 In total, 27 directors began the survey but 11 did not complete it. 18 answered the first question but two respondents left the survey after this first question.

a source of completely new information on a topic that is in need of greater scholarly attention. At a minimum, the data can help contextualize the findings presented in the preceding chapters and point to productive areas for future research.

5.1.2 Representativeness

Figure 5.1 provides an overview of directors that participated in the survey. Respondents came from seven Reserve Banks, with the Chicago and Minneapolis Feds most represented; each of those banks had three respondents. The New York, Philadelphia, Cleveland, Kansas City, and Dallas Feds did not have any survey participants, though two respondents elected not to identify their Reserve Bank affiliation. The majority of respondents, about 63%, were Class B directors. Class A and Class C directors were each represented by three respondents. Lastly, a majority of respondents (nine) served on the boards of directors in the 2000s, compared to five that served in the 1990s and two that served since 2010.

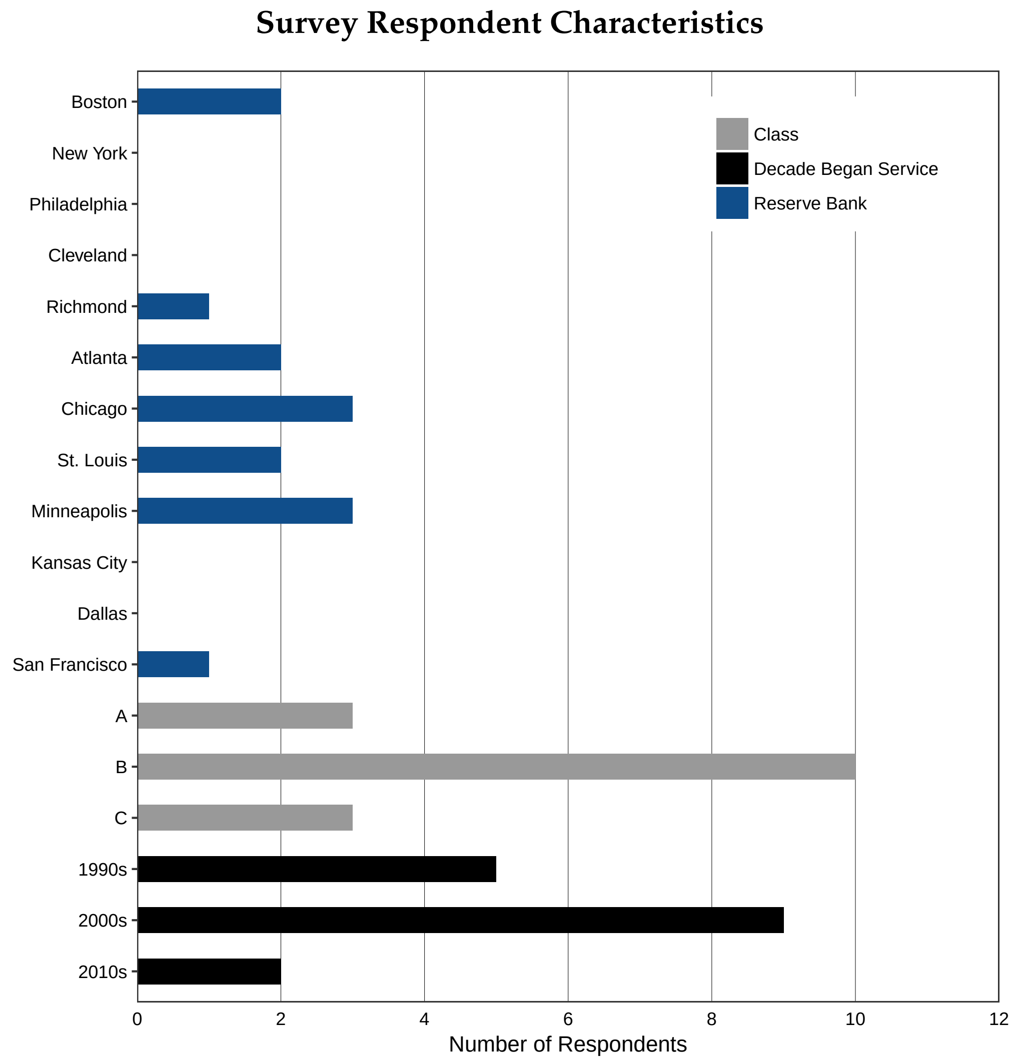


Figure 5.1: Survey Respondent Characteristics. The x-axis denotes the number of respondents. The y-axis lists three groups of characteristics: the respondent's class, decade they began their director service, and the Reserve Bank with which they are affiliated. While the respondents cover each of the three director classes and decades of services, only seven of the 12 Reserve Banks are represented.

Table 5.1 below provides a cross tabulation of respondent characteristics, including respondents' self-reported party identification. The three Class A respondents in the sample represented the Richmond, San Francisco, and Chicago Feds. The three Class C directors represented the Boston, Atlanta, and Minneapolis Feds. Of the three Class A respondents, two identified as Republicans and one identified as an independent. Among the three Class C respondents, two identified as Democrats and one identified as a Republican. Of the 10 Class B respondents, two identified as Republicans. While the number of respondents is too small to reasonably glean patterns in respondent characteristics, at a basic level the relationship between director class and party ID seems to conform to what we would expect: Class A directors in the sample are more likely to identify as Republicans, while Class C directors are more likely to identify as Democrats.

Table 5.1: Survey Respondent Overview

Respondent	Bank	Class	Decade	Party
1	Atlanta	B	2000s	Independent
2	Atlanta	C	2000s	Democrat
3	Boston	B	2000s	Democrat
4	Boston	C	2000s	Democrat
5	Chicago	A	2000s	Republican
6	Chicago	B	1990s	Republican
7	Chicago	B	2000s	Democrat
8	Minneapolis	B	1990s	Republican
9	Minneapolis	B	2010s	*Prefer not to answer*
10	Minneapolis	C	1990s	Republican
11	Richmond	A	2000s	Republican
12	San Francisco	A	2000s	Independent
13	St. Louis	B	1990s	Democrat
14	St. Louis	B	1990s	Independent
15	*Prefer not to answer*	B	2000s	Democrat
16	*Prefer not to answer*	B	2010s	Independent

Note: The table describes the Reserve Bank, director class, decade of service, and party identification of respondents to the online survey.

Overall, however, directors who elected to report their partisanship were more likely to identify as Democrats than as Republicans or independents. This is somewhat surprising given the results from Chapter 3, which show that directors are significantly more likely to donate to Republican candidates and are concentrated on the right side of the ideological spectrum. A possible explanation for the seemingly large number of self-identified Democrats in the survey is that Democrats were disproportionately more likely to participate in the survey than Republicans or independents.

Class B respondents were much more likely to respond to the survey than the other director classes. About 8% of Class B directors invited to the survey completed it, compared to response rates of 2.5% and 3% for Class A and Class C directors, respectively. Across Reserve Banks, response rates were highest for the Atlanta and Chicago Feds, which each had about 10% of directors respond to the survey (though this amounts to just two and three respondents).

5.2 Survey Results

In this section, I discuss responses to the director survey. Given the small number of respondents, I present response counts, rather than percentages, in the charts below.[5] I also

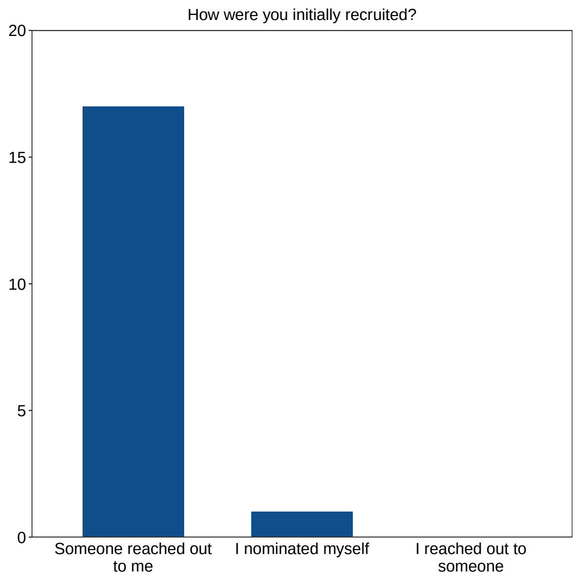
[5] The number of respondents may vary across questions; not all respondents answered every question.

break out responses by class and Reserve Bank where relevant in order to get a better sense of potential variation. For some questions—such as respondents' personal experience with recruitment and their policy preferences—I expect responses may differ across director class given both differences in the selection process (e.g. elections for Class A and B directors vs. Board of Governors' appointments for Class C directors) and differences in directors' professional backgrounds and ideology. For other questions, such as the influence of actors in the director selection process and directors' responsibilities on the board, I expect director experiences are more likely to be a function of the Reserve district in which they served. It should be stressed, of course, that the small sample precludes inferring that any differences in responses are due to respondent class or Reserve Bank. Rather, the aim is to document the range of responses and identify any patterns that may be suggestive of broader relationships.

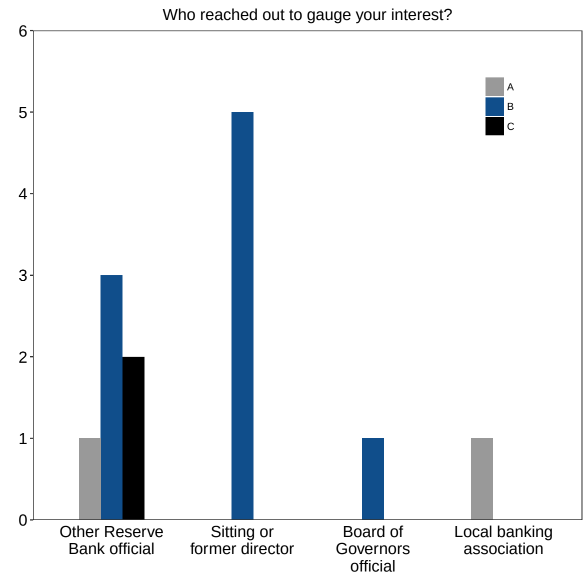
5.2.1 Director Selection

All but one of the survey respondents were approached by another party to gauge their interest in serving as a Reserve Bank director (Figure 5.2(a)). Just one of the three Class A respondents nominated themselves using the nomination form circulated among member banks voting in a director election. Among those who were approached by another party, most were contacted by Reserve Bank staff, as shown in Figure 5.2(b). Some of these respondents provided additional insight into their recruitment. One Class C director from the Minneapolis Fed, for example, noted they were approached by Reserve Bank staff about a directorship after serving on a Reserve Bank committee of community leaders that provided feedback on the district's economic health. In addition, a Class B respondent from the Chicago Fed reported they were approached by staff from both the Reserve Bank and the Board of Governors.

Class B directors were the only group of respondents to have been contacted by a sitting or former director. Notably, none of the Class B respondents were approached by a banking association, even though banking associations presumably recommend Class B as well as Class A director names to member banks. In contrast, one of the Class A directors reported being contacted by their local banking association.



(a) How were you initially recruited?



(b) If someone reached out to you: who reached out?

Figure 5.2: Director Recruitment. In panel (a), respondents were asked how they were initially recruited. For those who responded that someone reached out to them, panel (b) asks respondents who reached out. In panel (b), no respondents chose the options "member bank" or "other." For each panel, the y-axis denotes the number of respondents.

Figure 5.3 shows whether respondents were acquainted with a sitting Reserve Bank director prior to their own appointment to the board. A majority of respondents, 10 of the 16, were acquainted with a sitting director, including all three Class A respondents. That many respondents already knew a Reserve Bank director prior to their service suggests that the director recruitment process may be highly networked, with new directors being pulled from sitting directors' professional or social groups.

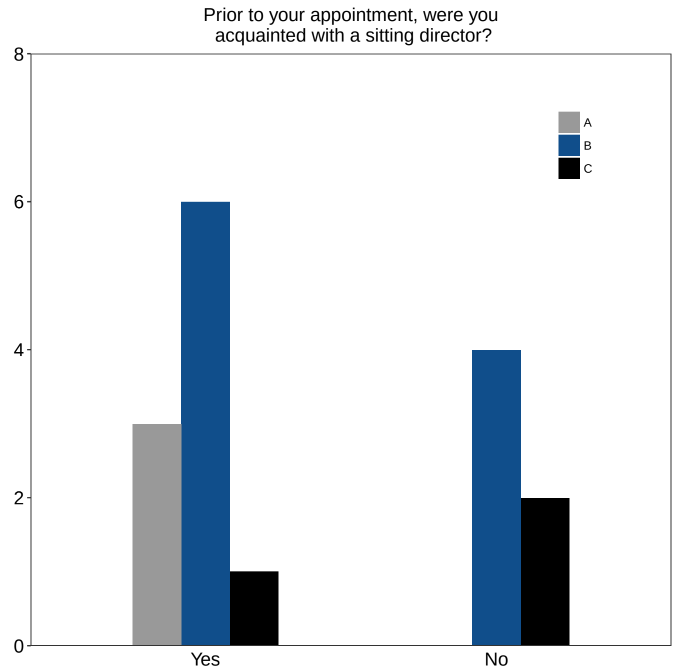


Figure 5.3: Prior to your appointment, were you acquainted with a sitting director? The y-axis denotes the number of respondents.

Directors were also asked to evaluate the degree of involvement—from "extremely" to "not at all"—of several actors in the director selection process. The top panel of Figure **??** shows respondents' evaluations of actor involvement in selecting *Class A* directors, given their personal experience serving as a director. Respondents generally agreed that Reserve Bank presidents and, to a lesser extent, sitting directors, were active in selecting Class A directors. By contrast, most respondents answered that officials from the Board of Governors did not play a big role in selecting Class A directors; a majority said the Board of Governors was "not at all", "slightly", or "somewhat" involved. Respondents were divided on the role of Reserve Bank staff.

Most respondents reported that most external groups—consumer organizations, labor unions, and business associations—were not especially active in recommending or selecting Class A directors. These groups were generally evaluated as "not at all" or "slightly" involved, save for in the Boston Fed, where a respondent noted that labor unions and business associations were "very" involved, and consumer groups "somewhat" involved. Moreover, respondents agreed that local elected officials were not involved in selecting Class A directors.

Consistent with my analysis of director elections from Chapter 4, local banking associations appear to be fairly active in choosing Class A directors. Five of the seven Reserve Banks represented in the sample had a respondent say local banking associations were either "extremely" or "very" involved in the process. This is true even for respondents from Reserve Banks that, as I show in the previous chapter, did not use nominating committees (composed of local banking associations) in their elections: Chicago, St. Louis, and Minneapolis. Interestingly, the one respondent who noted banking associations were "extremely" involved was from the Richmond Fed, which had a very small share of elections (less than 3%) involving a nominating committee. An explanation for the dissonance between the elections analysis and respondents' evaluations of banking involvement in elections may be that I have incomplete records of nominating committee involvement in director elections. Another explanation may be that banking associations participate in the these Class A elections through other, less formal means.

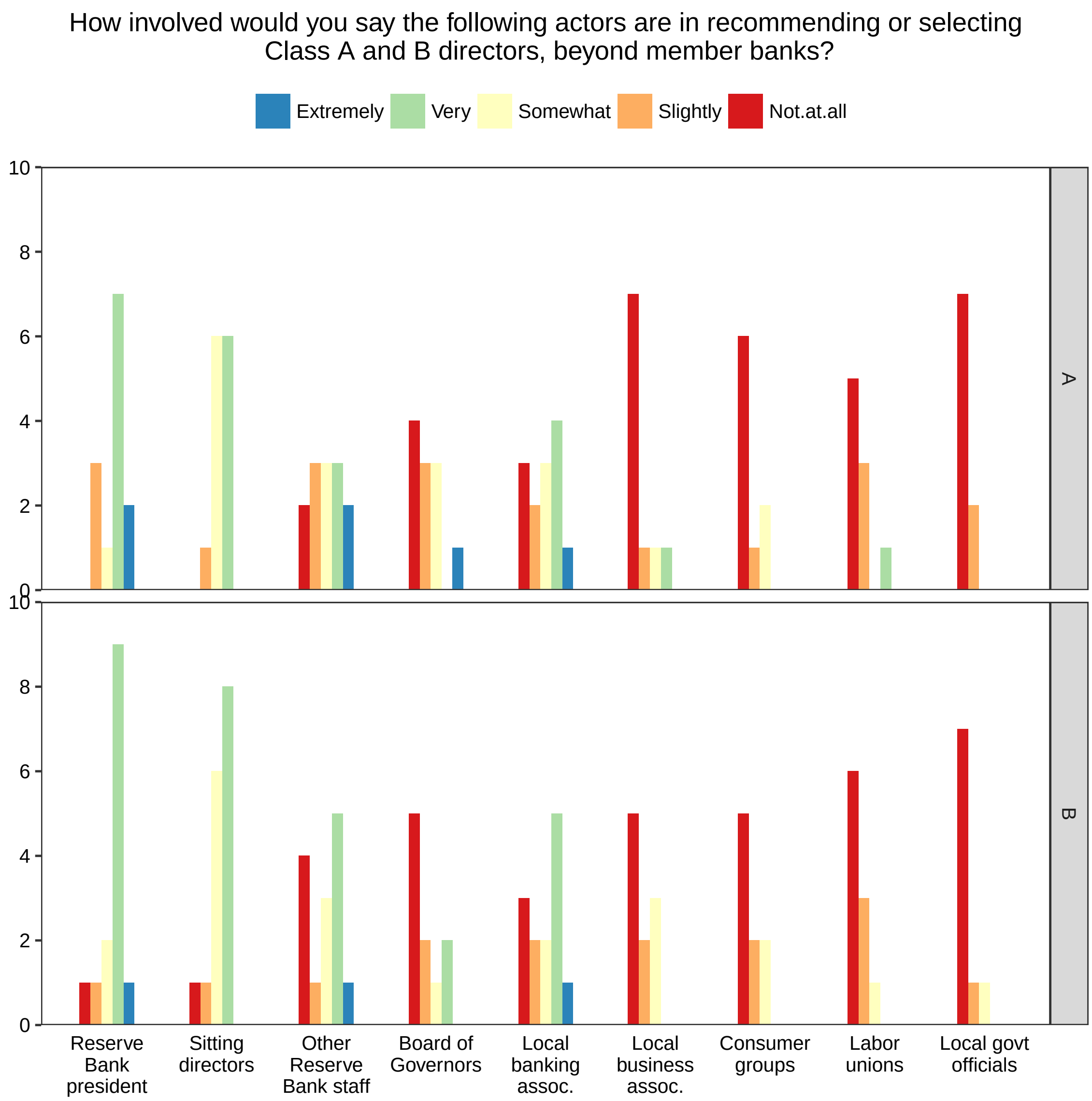


Figure 5.4: How involved would you say the following actors are in recommending or selecting Class A and Class B directors, beyond member banks? The y-axis denotes the number of respondents.

The response patterns with respect to respondent evaluations of *Class B* director selection are broadly similar to what we observed with Class A selection. As the bottom panel of Figure 5.4 shows, Board of Governors officials, labor unions, consumer groups, and business associations are generally not evaluated as being active in recommending or selecting Class B directors. Reserve Bank presidents, directors, and staff, by contrast, are identified as being "very" involved.

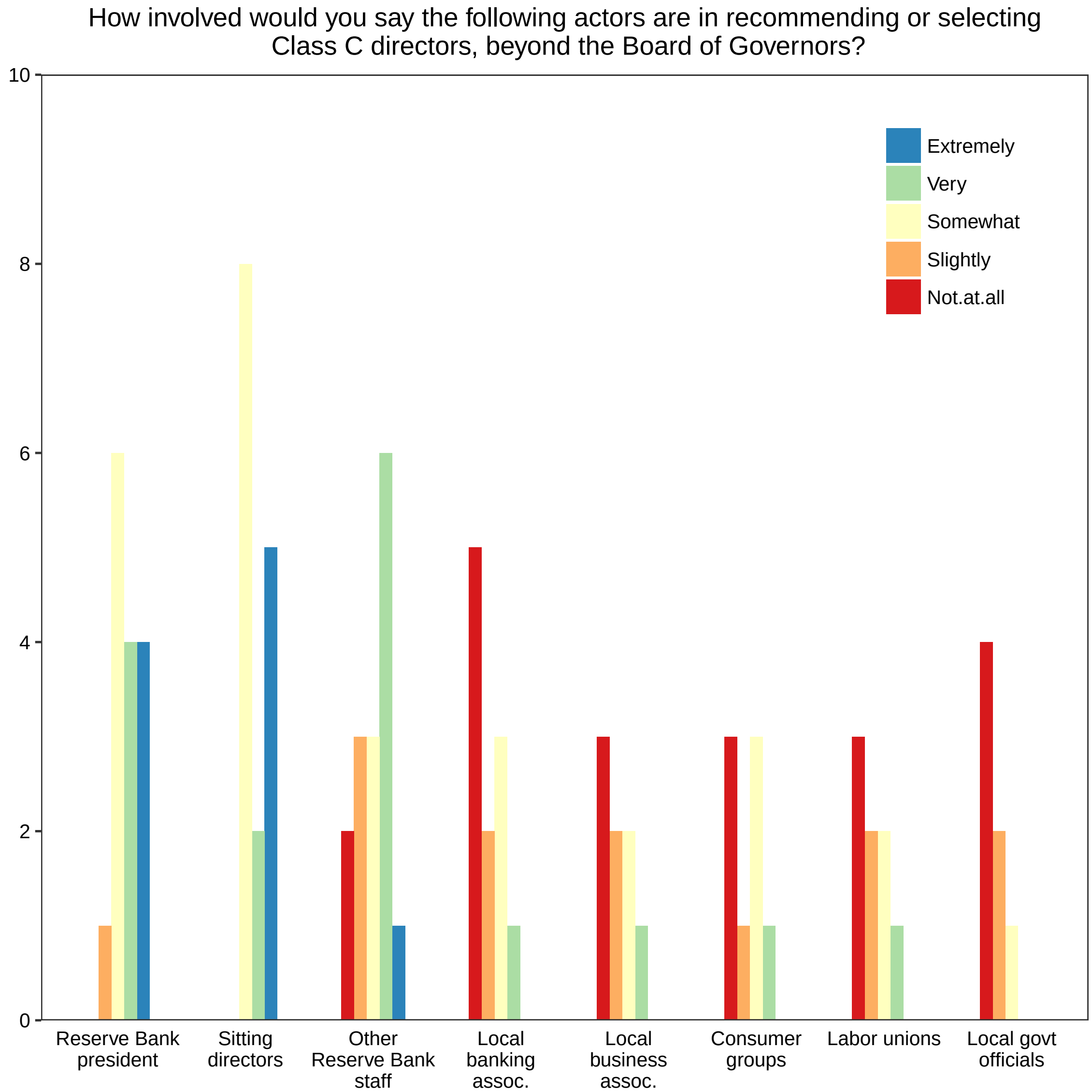


Figure 5.5: How involved would you say the following actors are in recommending or selecting Class C directors, beyond the Board of Governors? The y-axis denotes the number of respondents.

Figure 5.5 shows respondents' evaluations of involvement in the Class C director selection process, beyond the role of the Board of Governors. As with the selection of Class A and B directors, Reserve Bank presidents, sitting directors, and staff appear to play an important role in recommending or selecting Class C directors. Most respondents identified these three actors as "extremely", "very", or "somewhat" involved. In contrast to evaluations of Class A and B director elections, more respondents evaluated consumer groups, labor unions as business associations as being "very" or "somewhat' involved in selecting Class C directors. These responses were concentrated in the Boston, Atlanta, and San Francisco Feds.

As the charts above show, Reserve Bank presidents and sitting directors appear to be fairly active in the director selection process across districts, especially relative to outside groups and the Board of Governors. Figure 5.6 below displays directors' responses when asked how often Reserve Bank presidents and directors propose names to fill vacant director seats. Overall, a majority of respondents said sitting directors propose names to fill vacant director seats "most of the time." By contrast, a majority of respondents said Reserve Bank presidents proposed names only "sometimes". Sitting directors appear to play an important role in selecting new directors in each district, consistent with the results presented earlier that show most directors were already acquainted with a sitting director prior to their appointment. Compared to sitting directors, Reserve Bank presidents are generally reported to be less frequently involved in proposing names for vacant director seats.

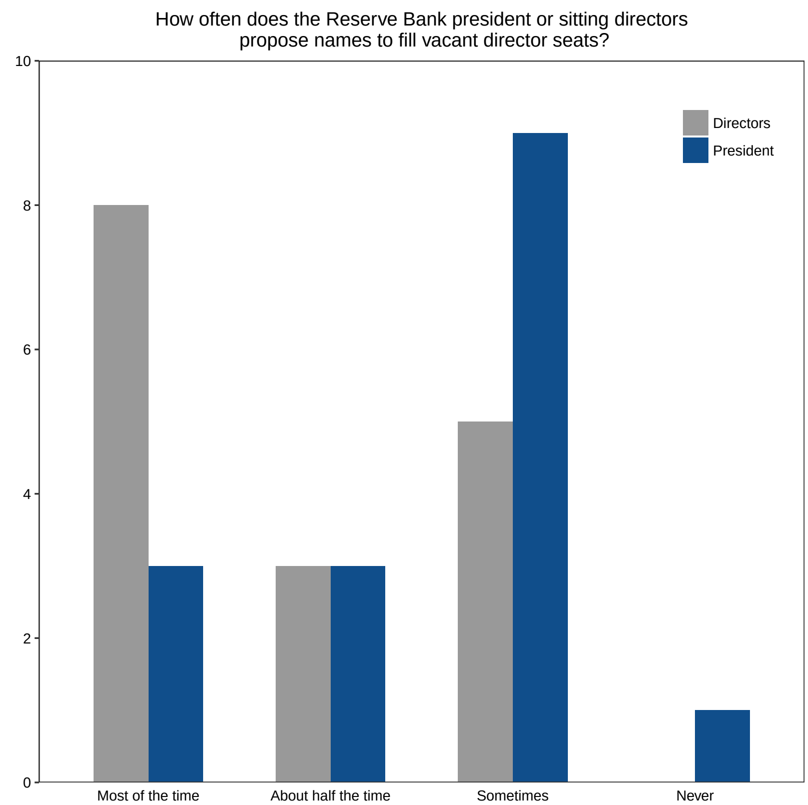
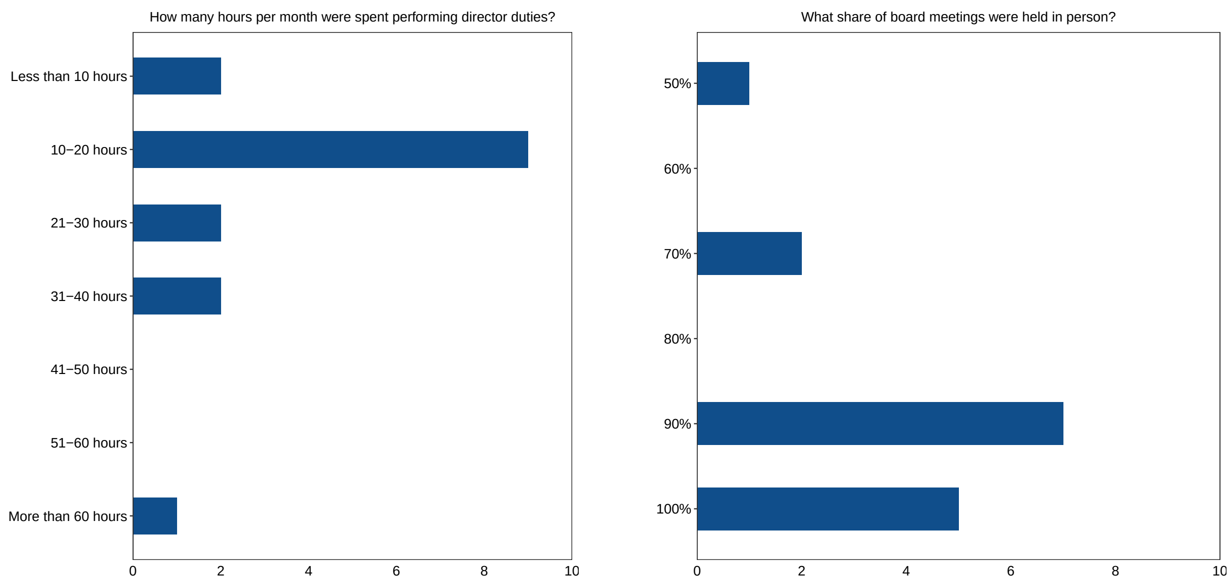


Figure 5.6: How often does the Reserve Bank president or sitting directors propose names to fill vacant director seats? The y-axis denotes the number of respondents.

5.2.2 General Responsibilities

To get a sense of directors' workload, they were asked several questions about their responsibilities and their interactions with Reserve Bank staff.

As seen in Figure 5.7(a), the majority of respondents devoted 10-20 hours each month performing director duties. One respondent, a Class B director from the Atlanta Fed serving during the 2000s, reported spending more than 60 hours each month on director responsibilities. Another respondent, a Class C director from the Boston Fed, noted that serving during the financial crisis was different than their experience as a director in the preceding years. While 10-20 hours per month was standard before the crisis, they reported participating in at least 10 hours of meetings each week, both at their Reserve Bank as well as at the Board of Governors. Overall, a majority of respondents said board meetings were held in person at least 90% of the time (Figure 5.7(b)). Directors were also asked whether they had an opportunity to express their preferred committee assignments, with slightly more than half of respondents saying they were not able to choose their committee assignments.



(a)

(b)

Figure 5.7: In panel (a): How many hours per month were spent performing director duties? In panel (b): What share of board meetings were held in person? For each panel, the x-axis denotes the number of respondents.

Figure 5.8 shows directors' responses when asked whether their responsibilities were more heavily focused on corporate governance (such as strategic planning and personnel decisions) or on policy (include discussing local economic conditions). Overall, most respondents said they spent much less time on corporate governance activities than on policy.[6]

[6] In a 1976 study of the boards commissioned by the House Committee on Banking, Currency, and Housing, most Reserve Bank boards reported spending the bulk of their time on administrative, rather than policy advisory, duties (U.S. House 1976).

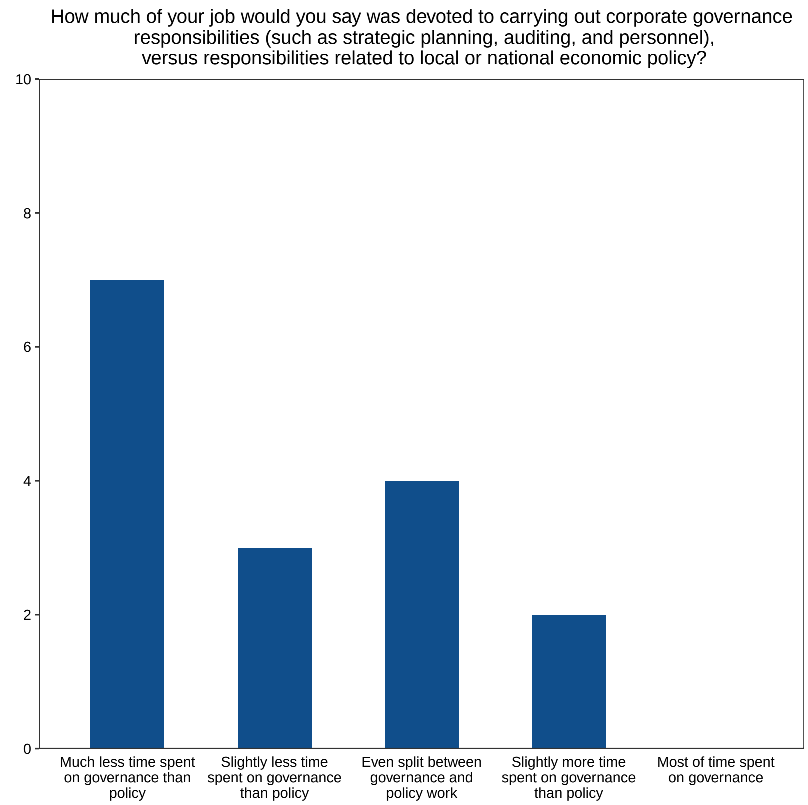


Figure 5.8: How much of your job would you say was devoted to carrying out corporate governance responsibilities (such as strategic planning and auditing), versus responsibilities related to local or national economic policy? The y-axis denotes the number of respondents.

The next three charts display responses to questions that try to gauge directors' potential influence on Reserve Bank policymaking and operations. First, as Figure 5.9 shows, directors reported being asked their opinions on a wide range of policy issues by Reserve Bank staff, though some respondents said they were never asked about inflation or local credit conditions. Most respondents agreed they were frequently asked to weigh in on local employment and the general health of the industries in which they work. This makes sense as director anecdotes about local economic conditions are often compiled by Reserve Bank staff and reported in the Federal Reserve Board's "Beige Book", which is released two weeks prior to each FOMC meeting.[7] Interestingly, a majority of respondents also reported being asked their opinions on inflation and regulatory burdens at least "somewhat often." When breaking out responses by director class, it does not appear that Reserve Bank staff ask different classes of directors to weigh in on different issues.

[7] One respondent, a Class B director from the St. Louis Fed, noted at the end of the survey that they saw comments in the Beige Book that were taken from their board discussions.

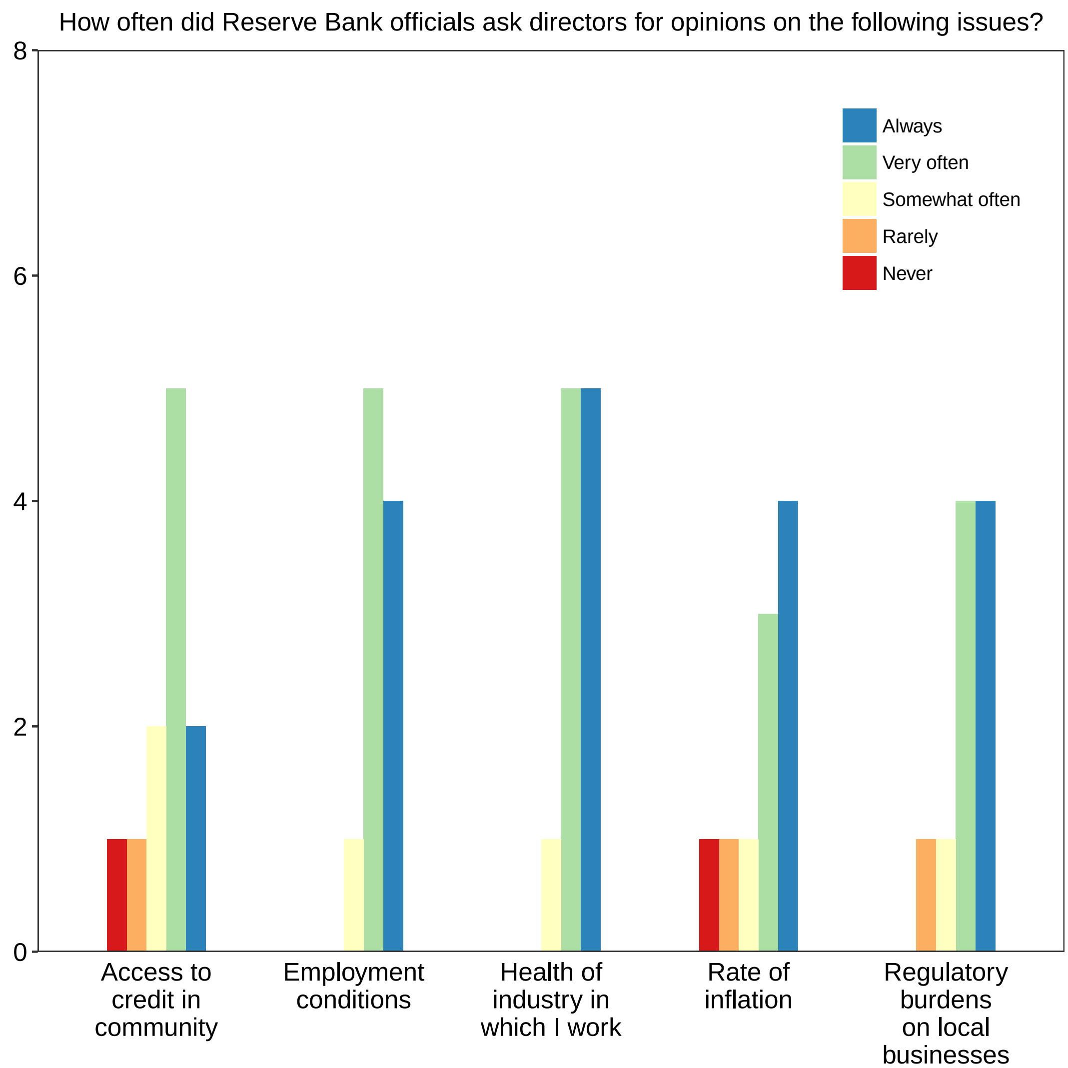


Figure 5.9: How often did Reserve Bank officials ask directors for opinions on the following issues? The y-axis denotes the number of respondents.

Second, in Figure 5.10, directors were asked to evaluate their influence on selected issues, with responses broken out by the responding director's class.[8] There is a fair amount of disagreement among respondents, both within and across class. For the most part, respondents agree ("somewhat" or "strongly") that the boards of directors have a meaningful impact on shaping the Reserve Bank's consensus understanding of local economic conditions and the Bank's community outreach efforts. A majority of respondents also "somewhat" agree that the boards have an impact on the direction of the Reserve Bank's research activities. Respondents appeared more divided, however, on directors' influence on key corporate governance issues: the Reserve Bank's audit and hiring and personnel decisions. This is perhaps explained by the limited time director spend on

[8] The wording of this question was inspired by a question in Harrison (1991).

corporate governance responsibilities in general, as shown in Figure 5.8.

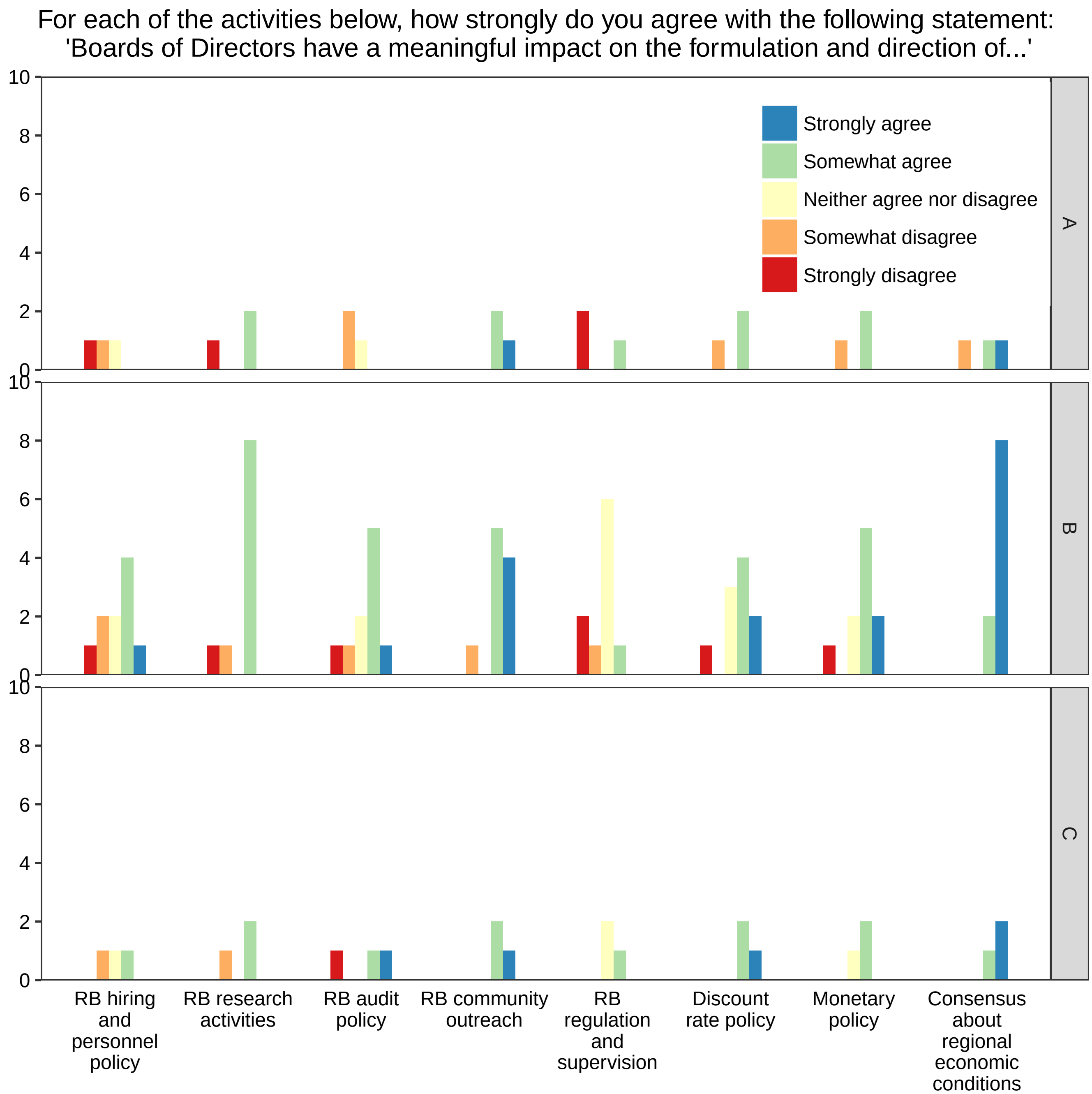


Figure 5.10: For each of the activities below, how strongly do you agree with the following statement: "Boards of Directors have a meaningful impact on the formulation and direction of..." The y-axis denotes the number of respondents.

Eleven of the 16 respondents "somewhat" or "strongly" agreed that directors have an impact on discount rate policy and monetary policy more generally. As directors vote on recommendations for the discount rate, it is slightly surprising that directors did not more strongly agree with the statement that they had influence on this area. I explore respondents' perceptions of their discount rate responsibilities in more depth in Section 5.2.4. For the Reserve Bank's regulatory and supervisory activities, the modal response was "neither agree nor disagree." At least one respondent from each class, moreover, "somewhat" agreed that directors have a meaningful impact on regulatory and supervisory activities. This too is somewhat surprising given that director involvement in these areas is ostensibly prohibited [9] Overall, the three Class C respondents seemed to exhibit less disagreement over the notion that they had influence over regulatory activities, monetary policy, and discount rate decisions than Class A and Class B respondents.

Lastly, directors were asked which three responsibilities they personally considered to be the most important part of the job. Figure 5.11 shows that most respondents selected providing Reserve Bank staff with intelligence about local economic conditions as one of the three most important responsibilities directors fulfill, followed by advising on interest rate policy. Serving as a liaison between their industry and the Fed, and overseeing the Reserve Bank's internal audit were the next most common selections for each of the classes of respondents.

[9] See *Roles and Responsibilities of Federal Reserve Directors*, Board of Governors of the Federal Reserve System, Publication 0113.

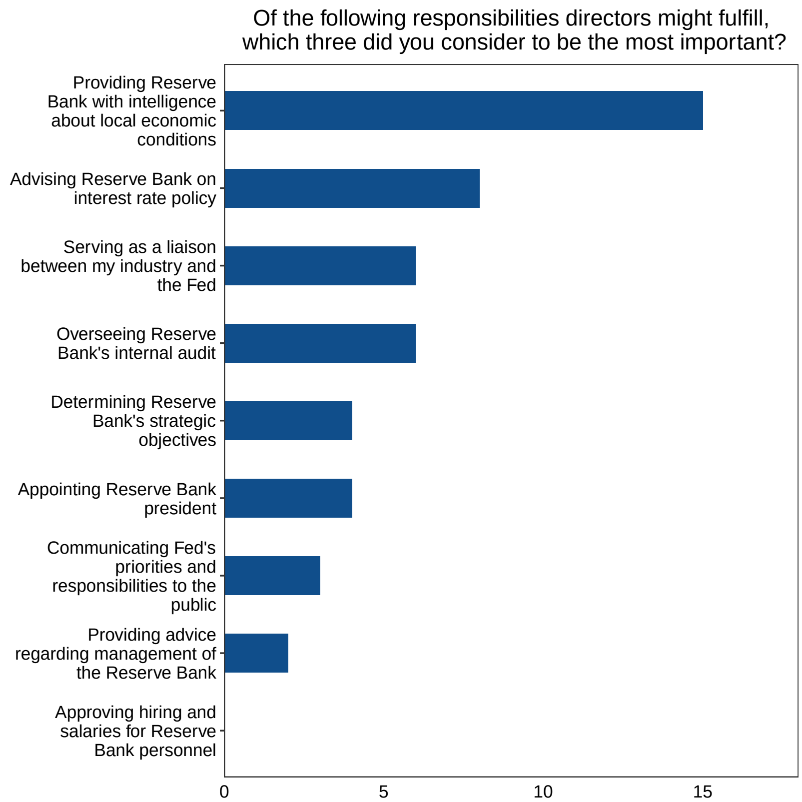


Figure 5.11: Of the following responsibilities directors might fulfill, which three did you consider to be most important? The x-axis denotes the number of respondents.

Overall, respondents seem to agree that providing intelligence about local economic conditions to shape the Reserve Bank's consensus about the regional economy is one of directors' most important, and influential, responsibilities. This result is consistent with the study by Harrison (1991), where nearly all the directors surveyed saw this as one of their primary—and, for many directors, only—substantive roles. At the same time, less than half of directors surveyed in that early study viewed their service as having an impact on the Reserve Bank research activities, discount rate policy, and monetary policy more generally. Respondents in my survey, by contrast, were somewhat more likely to agree that they have a meaningful impact on each of the areas.

5.2.3 President Appointment Process

Half of the 16 survey respondents participated in a search for a new Reserve Bank president during their tenure on the board of directors. Figure 5.12 below displays these directors' evaluations of how influential certain actors were in determining the short list of candidates to fill vacant Reserve Bank president seats. Respondents agreed that the chair of the board of directors that leads the search committee—always a Class C director—was "extremely" or "very" influential. Beyond the chair of the search committee, other Reserve Bank directors and officials from the Board of Governors appear to be the other actors that are most likely to be influential in the president appointment process. Executive search firms, which are utilized by Reserve Banks to establish a list of potential candidates, were generally viewed as "somewhat" influential, perhaps suggesting that these firms play a role in constraining directors' choice set. Local business and banking associations were generally not seen as influential. Outgoing presidents, moreover, seem to have limited influence in selecting their successors.

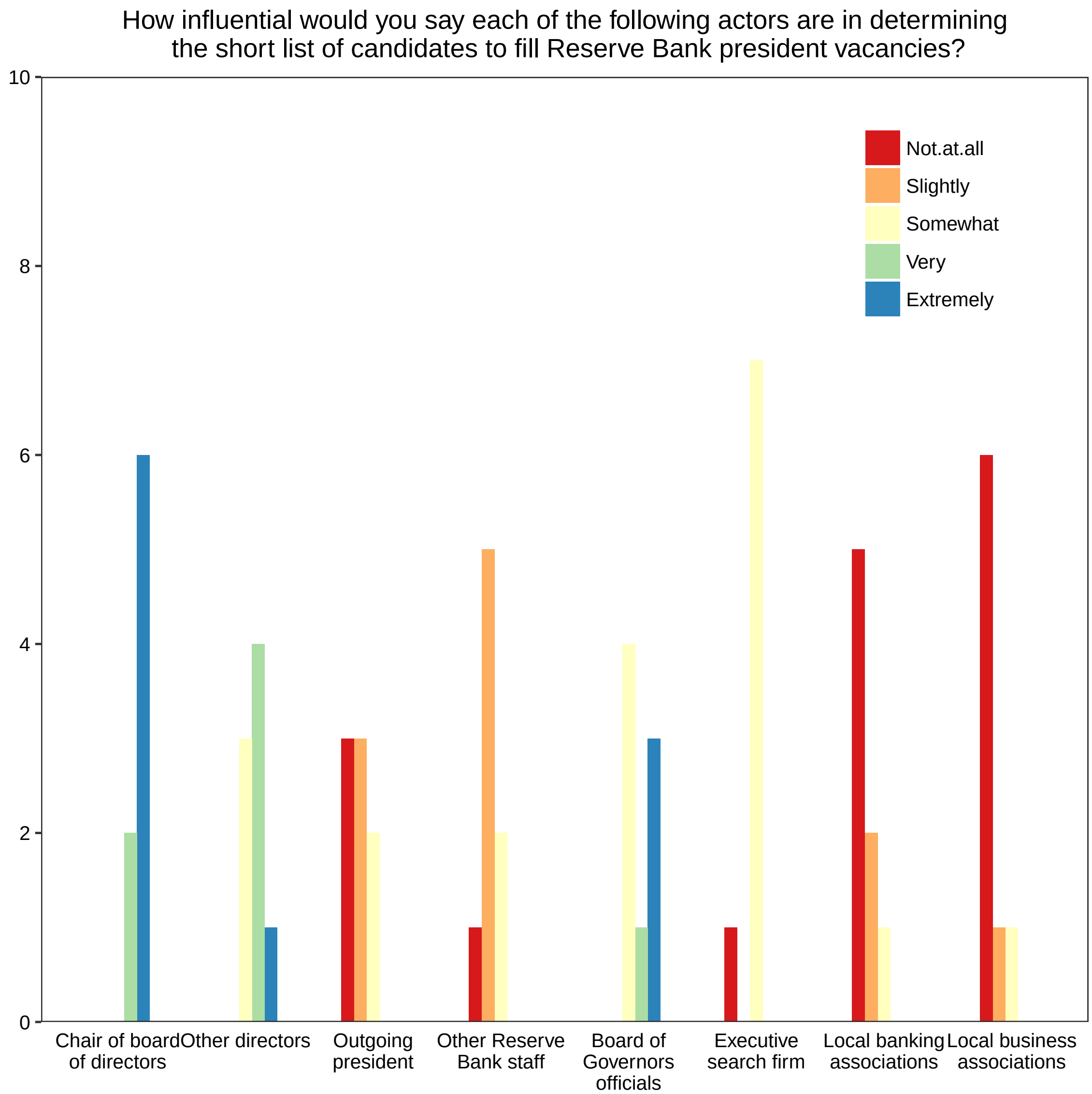


Figure 5.12: How influential would you say each of the following actors are in determining the short list of candidates to fill Reserve Bank president vacancies? The y-axis denotes the number of respondents.

Directors were also asked which three traits were personally most important to them when selecting a new Reserve Bank president. The most popular trait across all respondents was candidate's strategic vision. Respondents also identified previous Reserve

Bank experience, communication skills, business experience, and—for Class B directors—similar monetary policy views as important traits. Two respondents, Class A and Class C, wrote in leadership skill as a trait that was important to them. No respondents selected a candidate being well-known or sharing their regulatory policy views as among the most important traits for a president to have.

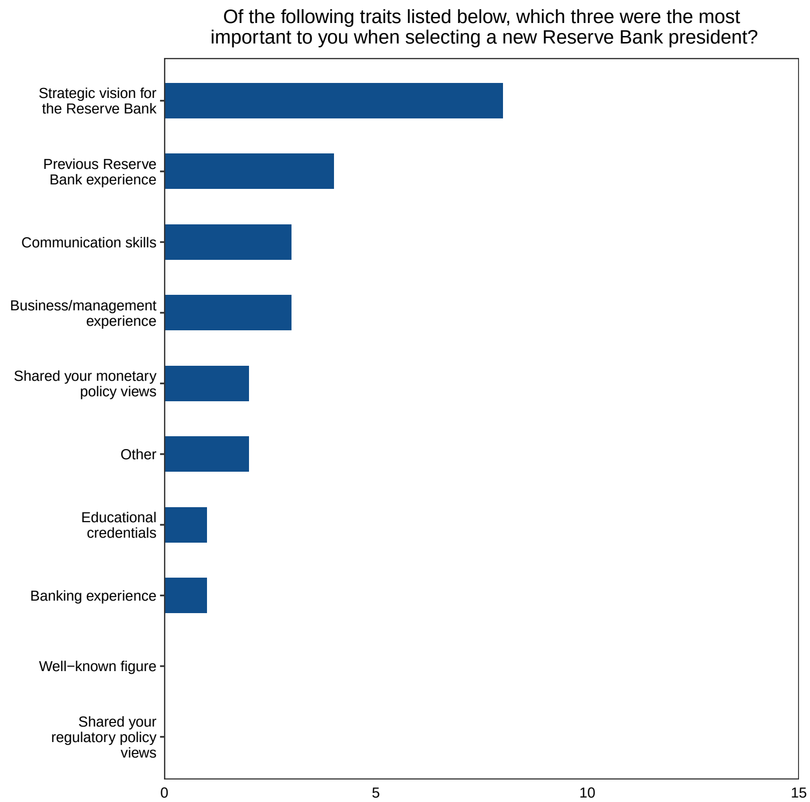


Figure 5.13: Of the following traits listed below, which three were the most important to you when selecting a new Reserve Bank president? The x-axis denotes the number of respondents.

As Figure 5.14 shows, directors who participated in a Reserve Bank president appointment process generally agreed that there was a relatively high degree of consensus among directors when choosing a candidate. The modal answer was 4 on a scale of 1 to 5, with 1 being the least consensus.

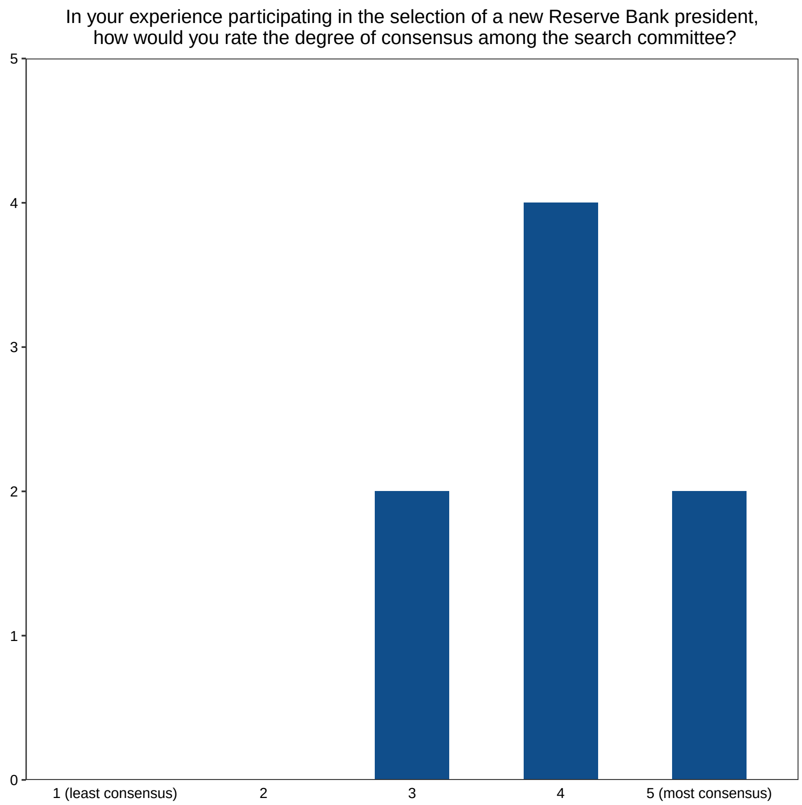


Figure 5.14: In your experience participating in the selection of a new Reserve Bank president, how would you rate the degree of consensus among the search committee? The y-axis denotes the number of respondents.

5.2.4 Discount Rate Recommendations

Survey participants were also asked about board dynamics when recommending a discount rate to the Board of Governors, which they are obligated to do by law every 14 days. All but one respondent reported that all directors on the board deliberated and voted on a discount rate. One respondent, a Class A director from the Chicago Fed serving in the 2000s, noted that only a committee of directors discussed the discount rate. Figure 5.15 displays directors' responses when asked how often their Reserve Bank president or staff proposed a course of action prior to their vote on the discount rate. Most respondents across each of the Reserve districts said a course of action was "always" presented prior to directors' votes. Two respondents, a Class C director from the Atlanta Fed and one who did not list their affiliated Reserve Bank, said the Reserve Bank president or staff "never" suggested a course of action. That presidents and their staff largely control the discount rate decisions is consistent with other anecdotal accounts, as well as assumptions made in empirical studies of discount rate policymaking (e.g. Jinushi and Kuttner 2008; Meltzer 2010).[10]. The experiences of the two directors who responded "never", however, suggests

10 In one example, Carl Vander Wilt, a former official at the Chicago Fed during the 1970s, noted that the Bank's board of directors was composed of representatives from the auto and construction indus-

that some boards may make these decisions independently.

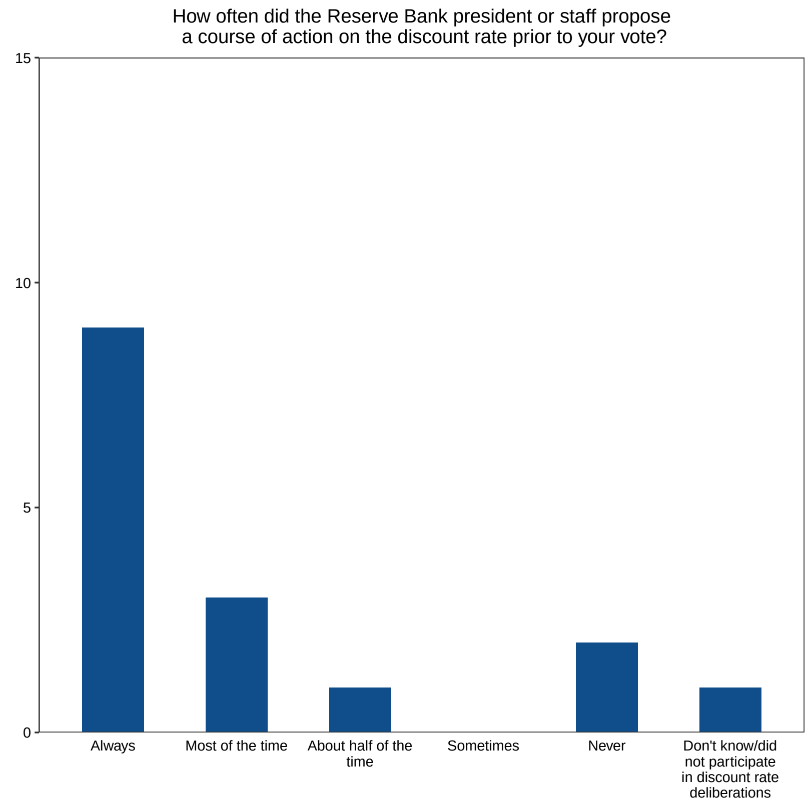


Figure 5.15: When making recommendations on the discount rate, how often did the Reserve Bank president or staff propose a course of action prior to your vote? The y-axis denotes the number of respondents.

Most respondents reported that directors "sometimes" disagreed on the appropriate discount rate policy (Figure 5.16). Two directors, moreover, responded "most of the time." Discount rate deliberations appear to be somewhat contentious, with directors having different opinions over the right course of action.

tries who resisted raising discount rates. The Chicago Fed president, Robert Mayo, however, made the final decisions and ultimately chose to submit recommendations for higher discount rates. See obituary for Robert P. Mayo, *Chicago Tribune*, January 30, 2003,`http://articles.chicagotribune.com/2003-01-30/news/0301300394_1_chicago-fed-mr-mayo-budget-director`

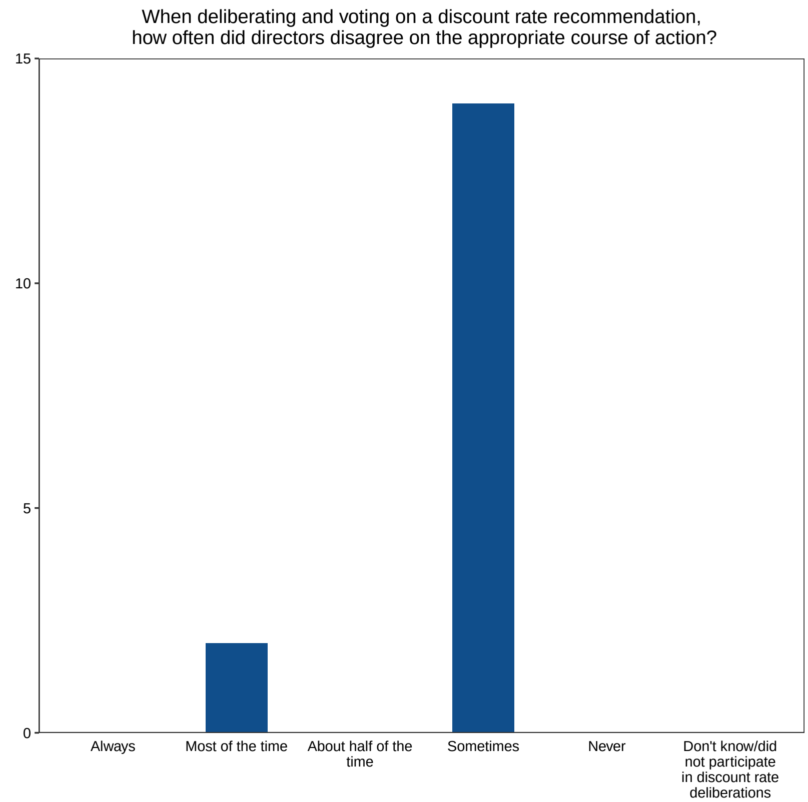


Figure 5.16: When making recommendations on the discount rate, how often did directors disagree on the appropriate course of action? The y-axis denotes the number of respondents. The two directors who did not list their affiliations with a Reserve Bank both responded "sometimes" to this question.

Lastly, in Figure 5.17, directors were asked how often they had a strong opinion on what the discount rate should be. Half of the respondents reported they had a strong opinion "most of the time", while another two—both Class B—said they "always" had a strong opinion. The remaining six respondents noted they had a strong opinion no more than half of the time; one of these respondents, a Class B director from the Boston Fed, said "never." These results suggest that while some directors may come into discount rate deliberations with a firm point of view on the best policy, others may be open to persuasion or more willing to follow other directors or Reserve Bank staff when voting on a recommendation.

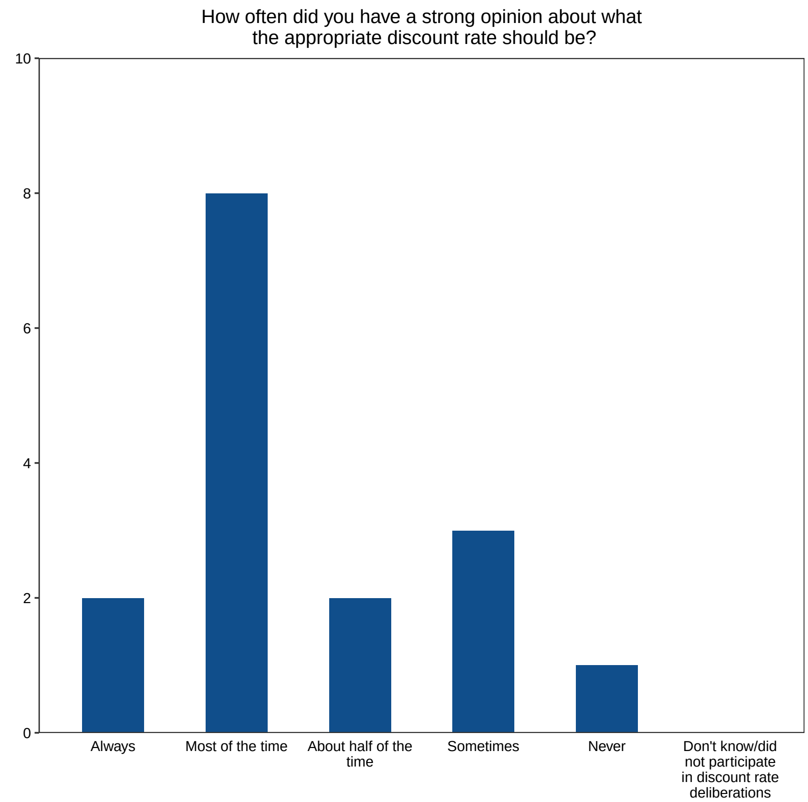


Figure 5.17: How often did you have a strong opinion about what the appropriate discount rate should be? The y-axis denotes the number of respondents. The y-axis denotes the number of respondents.

5.2.5 Takeaways and Policy Preferences

The final set of questions in the survey asked directors for their general takeaways from their director experiences and for insight into their policy preferences.

First, respondents were asked about their motivations for serving as a director in the first place. As Figure 5.18 shows, directors from each class were most strongly motivated by an interest in learning more about economic policymaking, the potential to represent their company or industry in policymaking, and civic duty.[11] Every Class A respondent reported an interest in learning more about economic policymaking and the opportunity to represent their company or industry viewpoint as "extremely" influential in their decision to serve, while the other classes had respondents note they were slightly less ("very") motivated by these concerns. Similarly, all Class C respondents reported being "extremely" motivated by a sense of civic duty, while the other classes has respondents less motivated by this concern. A desire to change the Fed's policies or Reserve Bank

[11] A Class C respondent from the Minneapolis Fed noted at the end of the survey that they used their time on the board of directors as an opportunity to bring attention to issues impacting rural areas like the one they lived and worked in. The director notes that they managed to arrange several trips in which Reserve Bank management visited rural areas to hear from concerned citizens.

management were not, in most cases, influential factors motivating directors to serve. Beyond the factors listed, one Class A respondent cited the opportunity to better understand the Federal Reserve System itself as "extremely" influential.

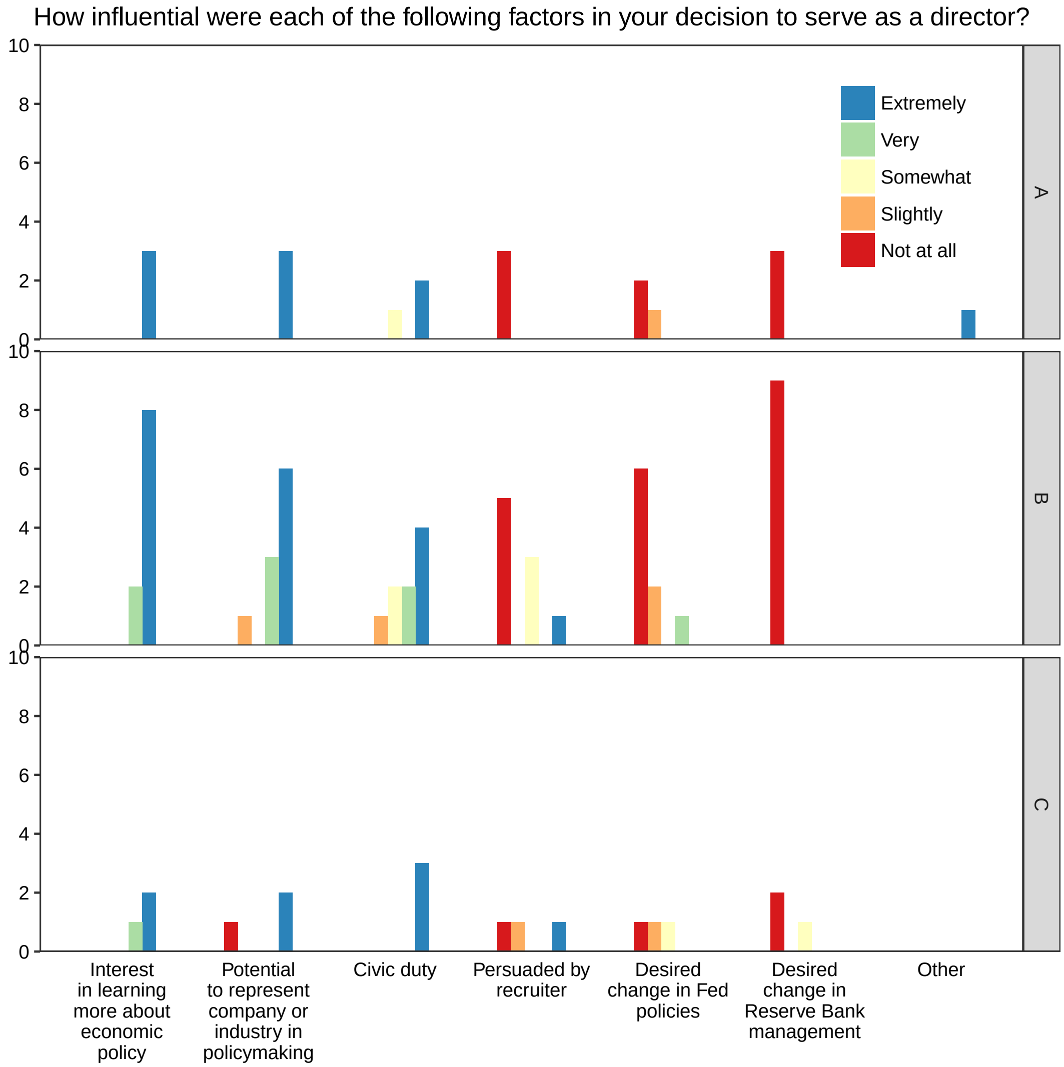


Figure 5.18: How influential were each of the following factors in your decision to serve as a director? The y-axis denotes the number of respondents.

When asked their primary reason for leaving the board, most directors (11 of the 16) cited reaching their term limit (Figure 5.19). Of the three directors who cited "other" reasons for leaving, two had moved out of their Reserve district before being term limited, while one—a Class A director from the Chicago Fed—said they did not feel like they were listened to by Reserve Bank staff.

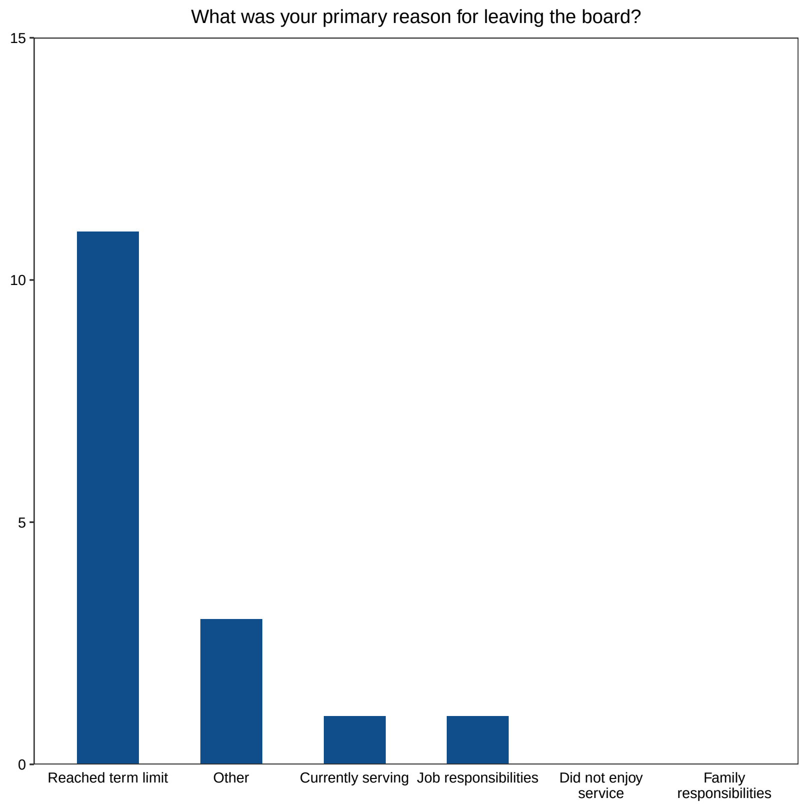


Figure 5.19: What was your primary reason for leaving the board? The y-axis denotes the number of respondents.

Figure 5.20(a) below shows that most directors "strongly" agreed with the statement that other board members valued their input in board discussions. All three Class A directors strongly agreed with the statement, while Class B and C directors responded less uniformly. A majority of directors also strongly agreed with the statement that Reserve Bank presidents and staff made decisions that reflected directors' counsel (Figure 5.20(b)). One exception is the Class A director who said they disagreed "somewhat." This respondent was the same person who reported leaving the board because they did not feel like Reserve Bank staff was listening to them.[12]

[12] At the end of the survey, this respondent expressed disappointment that the Reserve Bank staff acted "more and more like government employees year after year" and suggested that waste in Fed could be eliminated "if a more private sector mentality existed." The respondent also suggested that having 12 Reserve Banks was outmoded.

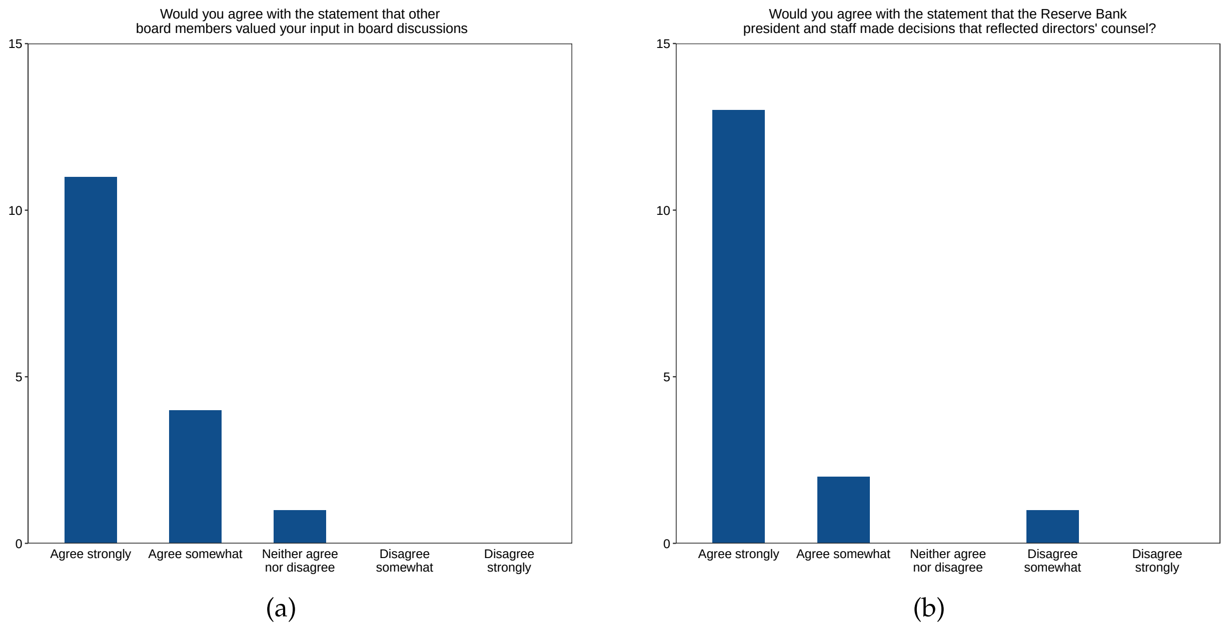


Figure 5.20: In panel (a): Would you agree that other board members valued your input in board discussions? In panel (b): Would you agree with that the Reserve Bank president and staff made decisions that reflected directors' counsel? For each panel, the y-axis denotes the number of respondents.

The following two charts display respondents' answers to questions that try to gauge their policy interests and preferences. As Figure 5.21 shows, a majority of directors say they follow policy issues related to monetary policy (such as inflation and employment) more closely than regulatory policy issues. Another six respondents reported following both monetary policy and regulatory policy issues equally. Just one respondent, a Class B director from the Boston Fed, reported following regulatory issues more closely in their day-to-day-life.

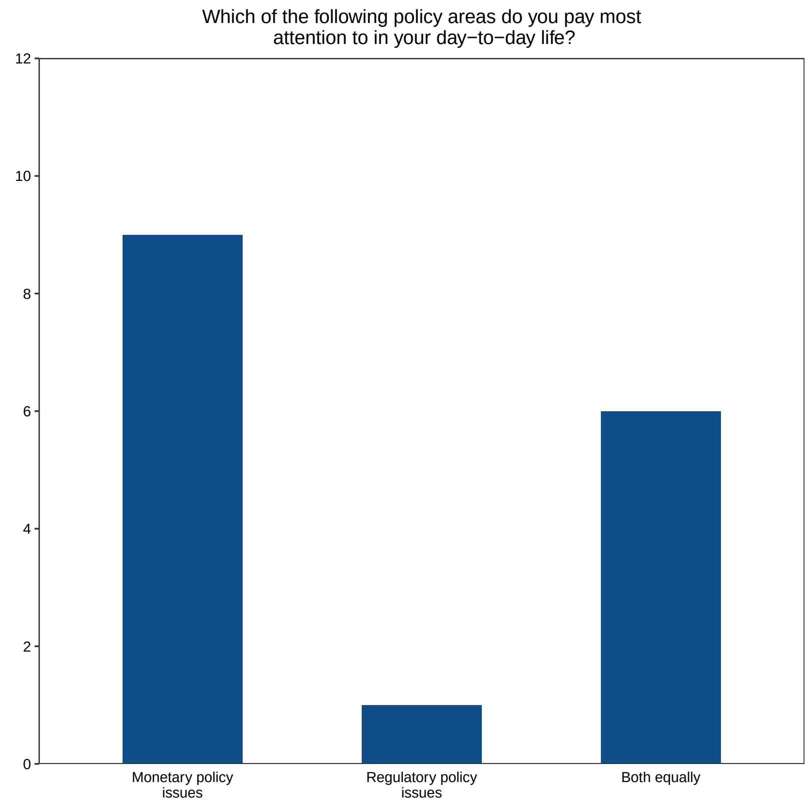


Figure 5.21: In general, which of the following policy areas do you pay most attention to in your day-to-day life? The y-axis denotes the number of respondents.

Directors were more likely to say that there is "too much" or the "right amount" of regulation of the business and financial sectors today than "too little" regulation (Figure 5.22(a)). The three Class A respondents agreed that there was "too much" regulation, while two of the three Class C respondents said there was "too little." The four respondents who said there was too little regulation all identified as Democrats; among the respondents who said there was too much regulation, just one identified as a Democrat while the others identified as either Republicans or independents. Opinions were more varied when directors were asked whether they would support a proposal to increase interest rates (in early February 2018). Ten of the 16 respondents, including all three Class A directors, reported they would "strongly" or "somewhat" support such a proposal. One could interpret this result as potentially consistent with theoretical predictions of anti-inflationary bias among Reserve Bank policymakers and, especially, bankers.Unlike opinions on regulation, opinions on raising interest rates did not seem to be correlated with respondents' self-reported partisanship.

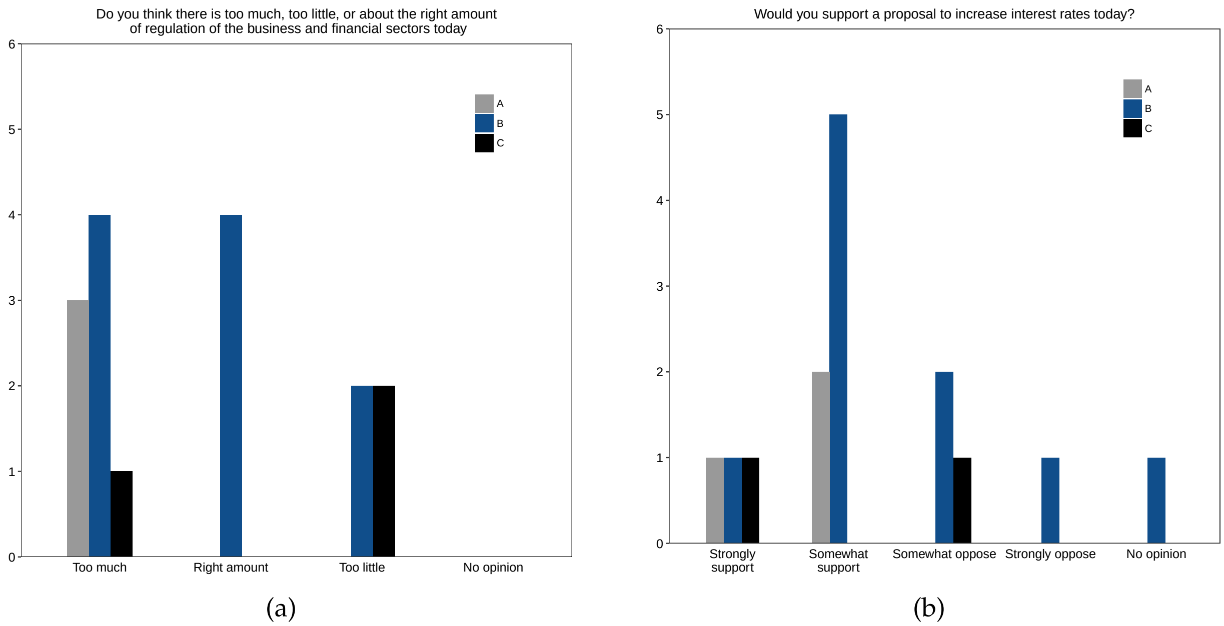


Figure 5.22: In panel (a): In general, do you think there is too much, too little, or about the right amount of regulation of the business and financial sectors today? In panel (b): In general, would you support a proposal to increase interest rates today? For each panel, the y-axis denotes the number of respondents.

5.3 Discussion

In this chapter, I surveyed former and sitting Reserve Bank directors about their experiences serving on the board. The primary objective was to uncover details that clarify how the boards of directors operate in practice and provide descriptive insight that can inform the development of much-needed theoretical work in the domain of Reserve Bank governance. While the sample of respondents was quite small and unrepresentative of the broader population of directors serving since 1990, the results are a source of new information that can help ground our understanding of important policymakers and policymaking processes, and, ultimately, guide future research.

Among the questions asked directors, I highlight five takeaways. First, the survey suggests that director recruitment processes are highly networked: most respondents were already acquainted with a sitting director prior to their selection, and sitting directors routinely propose names of their acquaintances to fill vacant director seats. Second, respondents perceived banking associations to play a fairly active role in selecting Class A and B directors, even in those Reserve Banks that are not known to use nominating committees in elections. This is consistent with the analysis in the previous chapter, which suggested that banking associations may be coordinating director elections through less formal or observable means. More generally, a wide range of actors appears to be involved in director selection at least some of the time. Third, directors think they're most influential in shaping Reserve Bank consensus on local economic conditions—just as they did in the survey by Harrison (1991)—but unlike that study they also see themselves as influential on the formulation of monetary policy. Directors moreover did not generally disagree with the statement that they had influence over regulatory and supervisory activities. Fourth, respondents noted that Reserve Bank staff and presidents in most cases suggested a course of action on discount rate policy prior to directors voting on a recommendation. This confirms other anecdotal accounts and assumptions made in empirical analyses of discount rate decisionmaking. Respondents also suggested that discount rate deliberations were characterized by a moderate degree of disagreement. Fifth, most respondents said they were motivated to serve as a director by an interest in learning more about economic policymaking and the potential to represent their company or industry in the policymaking process. Every Class A respondent reported the opportunity to represent their company or industry as "extremely" influential, while every Class C respondent reported being "extremely" motivated by a sense of civic duty.

More generally, the survey illustrates that director experiences may vary considerably, even within the same Reserve Bank. Though more observations are needed to draw conclusions about relationships underlying response patterns, there appears to be a high degree of variation worthy of future exploration.

A significant drawback to this study is its low response rate, which inhibits a more comprehensive comparative analysis of director responses and limits its external validity. This is a problem for qualitative studies of elites more generally and for the population of interest specifically. As other scholars have noted, gaining access to corporate and economic elites—who are busy and hard to reach directly—poses particular challenges for researchers (see, for example: Useem 1995; Welch et al. 2002; Page, Bartels, Seawright 2011). This often results in low elite participation rates for survey research and interviews. For Reserve Bank directors specifically, preliminary discussions with a director and with an official at the Board of Governors' Reserve Bank Operations and Payment Systems (RBOPS) Division—the office charged with overseeing the Reserve Banks and their boards—foreshadowed difficulties obtaining director participation in my research. The RBOPS official noted that director representation at the Reserve Banks had become an increasingly sensitive issue and that directors themselves are cognizant of growing political attention to the boards. In particular, he cautioned that directors might be unwilling to speak even informally about their role out of fear that board activities would be presented in a political or partisan light.

Despite these challenges, this survey could be replicated on a larger scale by devoting greater attention to addressing nonresponse. Studies have shown that internet-based surveys of elites can achieve high response rates—in the 45-70% range—if followed up with phone or mail reminders (e.g. Fisher and Herrick 2012). A larger sample would enable more in-depth study of differences in responses across Reserve districts, and allow one to use the survey data to construct measures for empirical analysis.

Chapter 6

Conclusion

> "It seems essential to preserve our regional Federal Reserve System, which consists of 12 Federal Reserve banks with nine directors in each bank, together with a Federal Reserve Board in Washington. In this particular respect, our System is different from that of most countries because of our extensive area, and because of our political and economic structure of States and districts, based upon industrial, agricultural, commercial, and financial conditions and needs which are widely different in the various parts of the United States. The System is composed of essential parts. These parts, however, must be cohesive for the best functioning of the System...To be effective, the whole Federal Reserve System must be one." — M.S. Szymczak, member of the Board of Governors, 1933-1961.[1]

The governance of the twelve Federal Reserve Banks by boards of directors has been the subject of persistent congressional criticism and public suspicion since the Federal Reserve System's founding over a century ago. In the wake of the 2007-08 financial crisis, this indignation reached a fever pitch, sparking public demonstrations, the formation of interest groups devoted to Reserve Bank governance reform, and, with the passage of the 2010 Dodd-Frank Act, one of the most significant amendments to the Reserve Bank's governance structure since 1935. Despite these developments, no systematic social scientific study of the Reserve Banks or their governance has been pursued.

This dissertation is a step toward addressing this lacuna. It begins from the premise that the Reserve Banks and the boards of directors that oversee them play critical roles in economic policymaking in the United States. The boards manage Reserve Bank operations, provide input on interest rate policy, and directly appoint the Reserve Bank presidents who go on to vote in the FOMC. Given these responsibilities, who governs the Reserve Banks—and how they do it—has consequences for monetary and regulatory policies that affect nearly every citizen (and arguably millions more abroad). In addition, the boards of directors provide a channel through which financial interests may

[1] Statement before a subcommittee of the Committee on Banking and Currency of the United States Senate (June 3, 1935). In the debates leading up to the passage of the Banking Act of 1935, Szymczak was a proponent of delegating more authority to the Reserve Banks and the boards of directors.

make their voice heard in the policymaking process. This is a poorly understood but potentially powerful influence opportunity that is effectively only available to local banks, which elect a majority of the nine-member boards in each Reserve district and serve on the boards themselves. By having a formal seat at the table in the governance of important policymaking institutions, directors and banks wield a public authority that guarantees them a stable and protected means to pursue policy change inside the very institutions that regulate them. Investigating the dynamics and consequences of these unique institutional arrangements are thus fundamental not only to our understanding of how the Fed makes policy, but also the myriad ways in which private interests might influence the policymaking process. The three empirical chapters of this dissertation collectively aim to provide such an inquiry and, in doing so, provide a starting point for future research on Reserve Bank governance.

In Chapter 3, I investigate a product of the Reserve Banks' system of governance: the distribution of political ideologies on the boards of directors. I find that Reserve Bank directors are politically engaged and relatively conservative. Directors are more likely to donate to political campaigns, more likely to donate to Republican candidates, and more conservative than the average campaign donor in the United States. In particular, bankers elected by local banks (Class A directors) are more conservative than their non-banker counterparts. Class C directors are the most ideologically diverse director class, though their median and average ideal points lean conservative. I also document ideological variation across Reserve districts: the directorates of the Boston and New York Feds are significantly less conservative than the directorates of the ten other Reserve Banks. Finally, I show that directors' average conservatism has steadily declined over the last 40 years. Taken together, the results provide a window into the political leanings of the private citizens who govern the Reserve Banks.

Chapter 4 digs into the election of Class A and Class B directors by private banks—the initial entry point and key mechanism through which banks formally participate in the governance of the Reserve Banks. Using an original dataset of director elections between 1980 and 2015, I find that most banks do not take advantage of the opportunity to nominate director candidates, and that, consequently, elections are rarely contested. Among races that are contested, the probability of winning is strongly predicted by the number of nominations—that is, endorsements—a candidate receives. By contrast, banks do not appear to vote according to some measure of candidate quality as defined by a candidate's professional or educational background, nor does it appear that banks are picking up and selecting on candidate political ideology. Directors lean conservative not because voting banks are choosing the more conservative candidate, but because the candidates are conservative to begin with. I also find evidence that nomination committees composed of regional banking associations successfully inhibit contestation. Consistent with early accounts of director elections, regional state banking associations do appear to control the nomination process.

Finally, in Chapter 5, I present the results of a survey of sitting and former directors, which provides critical first-hand accounts of what directors do, which actor interests are involved in director and president appointments, and how directors perceive their influence on policy. Among other findings, the survey suggests that director recruitment processes are highly networked: most respondents were already acquainted with a sitting director prior to their selection, and sitting directors routinely propose names of their acquaintances to fill vacant director seats. Moreover, respondents perceived banking associations to play an active role in selecting Class A and B directors, even in those Reserve districts that are not known to use nominating committees in elections. The survey responses also show that directors see themselves as playing an influential role in formulating monetary policy, and many did not disagree with the statement that they had some influence over regulatory and supervisory activities at their Reserve Bank. More generally, the survey illustrates that director experiences may vary considerably, even within the same Reserve Bank. Overall, the survey yields insight into a wide range of topics relating to Reserve Bank governance that may serve as starting points for future studies.

6.1 Implications

This project has implications for both the academic literature and public policy. As the first to comprehensively examine the Reserve Banks and their governance, the analysis sheds light on a key component of the Federal Reserve System underappreciated in the literature on the Fed and the politics of monetary and regulatory policymaking. In doing so, it provides a more complete portrait of the Fed's institutional character and helps contextualize well-established, but undertheorized, empirical findings about Reserve Bank presidents' voting behavior in the FOMC. Moreover, the analysis contributes to a deeper understanding of the substance of the Reserve Banks' "private" status, issues at the root of more normative concerns regarding the Fed?s accountability to the public. The analyses presented here may thus be relevant to longstanding debates in the discipline about the Fed's democratic legitimacy.

The project also bears on the literatures on elite political behavior and interest group influence. By focusing on the Reserve Bank boards of directors, this dissertation highlights a unique opportunity, available to local economic elites and community leaders, to participate directly in federal policymaking. In particular, bankers may use their participation on the boards—both in terms of electing representatives to serve and serving on the boards themselves—to ensure their policy preferences are represented throughout the organization. The boards thus provide banking interest with an influence strategy not available to other interest groups in the American political economy, and one that can complement other strategies in their portfolio. This privilege, moreover, is built into the Fed's statutory design.

Through providing a detailed account of directors and the election process, this project can also inform the current political debate over Reserve Bank governance. As demonstrated in Chapter 3, directors tend to be politically conservative, with bankers (Class A directors) being the most conservative of all. Proposals to remove bankers from the boards could potentially have the effect of making the boards less conservative overall, which perhaps might result in the selection of less hawkish presidents System-wide. Related proposals that would require the boards to earmark Class B and C seats for organized labor, community organizations, and academia (e.g. Haedtler, Levin, and Wilson 2016) might also introduce more ideological diversity into the boards, given that I find directors from these industries are less conservative than directors from banking and business on average. At the same time, the appointment of Class C directors has not obviously shifted the average ideology of the directorates leftward. Though Class C directors are the least conservative director class, they are still concentrated on the right side of the ideological spectrum and share many of the biographical characteristics as the banker-elected directors. Reforms targeted solely at reducing the influence of banks in the director selection process may thus not deliver the outcome progressive activists seek.

6.2 Going Forward: A Research Agenda on Reserve Bank Governance

The analyses presented in this dissertation are heavy on description but thin on explanation. This is a significant limitation of the project but also an opportunity. If anything, the preceding chapters underscore how little we know about Reserve Bank governance and how many questions remain unanswered. Going forward, the empirical findings and institutional details documented here can be leveraged to conduct more in-depth investigations of the boards, their preferences, and their influence. Pursuing these lines of inquiry would greatly enhance our understanding of how the Fed makes policy and how banking interests participate in the policymaking process. Below, I outline a few paths forward, beyond some of the specific research projects suggested in the concluding sections of Chapters 3-5. I begin by discussing some general methodological approaches that would be especially productive when studying Reserve Bank governance, then proceed to discussion of substantive areas that are in need of more attention.

6.2.1 Methodological Approaches

Formal Modeling

The Reserve Banks are incredibly rich institutional environments to apply existing, and generate new, theoretical models. A key goal of this dissertation was to provide some descriptive color about the rules and processes that undergird the governance structure to aid future theory-building efforts. Given how little attention has been paid to this area, formal modeling could generate significant advances in our knowledge about the Reserve Banks and more clearly define appropriate empirical strategies for studying them. There are also nice institutional properties here that make Reserve Bank governance especially amenable to formal modeling: e.g veto power; multiple classes of directors; different rules governing class eligibility; bank group voting; and multiple appointers.

One promising line of research would more rigorously grapple with the selection of Reserve Bank presidents. While Chapter 4 examined the election of Class A and B directors by member banks, there is still much to learn about how directors wield their appointment authority once they begin their service—and how this might reflect their own appointment by private banks (for Class A and B directors) or the Board of Governors (for Class C directors). Formalizing the basic logic of directors' appointment of presidents would clarify the means by which bank preferences are channeled through the selection process, and help elucidate the data generating process that produces the (conservative) ideological distribution of presidents we observe. Moreover, as president appointments are arguably the most potent source of directors' policymaking influence, developing testable predictions about how this process works would be an especially useful direction for jumpstarting a research agenda on Reserve Bank governance.

One approach is to conceptualize the appointment of Reserve Bank presidents in a principal-agent framework, modeling the (1) selection of directors by private banks and the Board of Governors and the (2) selection of presidents by directors as a nested process in which forward-looking banks use director appointments as an instrument to obtain a Reserve Bank president that will pursue their preferred monetary and regulatory policies. A starting point could begin from the simple assumption that both private banks and the Board (principals in the director selection process) and directors (principals in the president selection process) aim to select agents that are ideological allies—a pattern that has been observed in the Board of Governors appointment literature (e.g. Chappell, McGregor, and Vermilyea 2005; Adolph 2013)—though there are other appointment strategies that would be interesting to consider (see Rogoff 1985 and Schnakenberg, Turner, and Uribe 2017, for example). Analyzing president appointments through this kind of framework would yield insight into actors' incentives—in this case, incentives for banks, the Board of Governors, directors, and presidents—and what kinds of enforcement mechanisms the appointing principals wield that might structure agents' willingness to comply (e.g. directors' authority to reappoint presidents).[2]

Another area that might be fruitfully modeled in game theoretic terms, and one that could formalize existing historical accounts of the Reserve Banks' institutional development, would be to consider the principal-agent relationship between Congress and the Reserve Banks. One way to think about the formal inclusion of banks in the Reserve Banks' governance structure is as a kind of deck-stacking strategy implemented by early 20th-century banking interests and their congressional allies (McCubbins, Noll, and Weingast 1987; Moe 1989).[3] By this logic, Congress effectively baked in a banker-friendly, conservative bias into the Reserve Banks and ensured that Bank presidents would, more often than not, express conservative policy preferences. Regardless of shifting political or partisan tides—which *would* likely shape the ideological distribution of the Board of Governors into the future—banking interests and their supporters in Congress could count on consistent pro-banker (and presumably inflation-averse) Reserve Banks.

In addition to these topics, the Reserve Bank boards are attractive institutions to explore a variety of other phenomena of interest to social scientists, including:

- Collective decisionmaking: how does the board reach decisions on the discount rate recommendation?

- Expertise and persuasion: do directors with more expertise in banking and economic policy dominate board decisionmaking?

[2] Formally modeling the selection processes would also require a more serious evaluation of banks' policy preferences and potential variation in preferences. For instance, do big (Group 1) banks have different monetary and regulatory policy preferences than small (Group 3 banks)? Does their appointment strategy differ as a result?

[3] As Moe (1989) writes: "Structural politics is interest group politics."

- Coordination: how do member banks coalesce around a single candidate when nominating directors?
- "Intercameral" bargaining: does strategic interaction between member banks and the Board of Governors—the two appointers of the boards of directors—shape the boards' composition?
- Voter turnout: what factors account for member banks' decisions to nominate candidates and turnout for director elections?
- Transparency: how might greater transparency over the director and president selection processes modify banks' appointment behavior?

Qualitative Methods

The study of Reserve Bank governance would especially benefit from qualitative approaches, including interviews, case studies, and archival research. While the dissertation utilizes some of these methods, much more work along these lines should be pursued. In an environment so opaque and data-sparse, qualitative methods are particularly useful for uncovering the networks operating in this space and the quiet and nearly undetectable ways in which private actors may exert influence on Fed policymaking.

One area where qualitative work would be fruitful is nominations of Class A and Class B directors. As the analysis in Chapter 4 showed, the nomination process in some Reserve districts appears to be coordinated by committees composed of state chapters of the American Bankers Association (ABA). But even in districts that do not use nomination committees, only a small share of private banks eligible to nominate a director candidate do so, and in most cases candidates run unopposed. One potential explanation is that the ABA coordinates director nominations in these districts through less formal means. Obtaining data on ABA participation to evaluate this possibility is difficult, however. While some Reserve Banks included nomination committee circulars with the election records I requested, the circulars do not shed light on how the committees decide on a preferred candidate or how the committees interact with the member banks that are eligible to vote in the election. They also do not tell us anything about why member banks generally defer to the state banking associations or what enforcement mechanisms the associations might have. The circulars might also understate the degree to which nomination committees are used in elections, as it is possible that some Reserve Banks did not forward along the nomination committee circulars as part of my FOIA request.

By contrast, interviews with regional ABA chapters, former directors, or even Reserve Bank staff could shed light on the pervasiveness of ABA participation and how local chapters coordinate private banks. Interviews of member bank managers could also illuminate explanations for why so few banks submit director nominations. Given the difficulty of observing interest group influence empirically, interviews and surveys would greatly improve our understanding of the role the ABA and other organized financial interests play in economic policymaking.

These interviews could be completed by case studies that take advantage of the fact that we have a dozen Reserve districts distributed around the country. As suggested in the empirical chapters, another key objective of this dissertation was to document regional variation in governance dynamics. Chapter 3, for instance, showed that directorate ideology varies considerably across Reserve Banks: the Boston and New York Fed boards are composed of relatively "liberal" political donors, while the other ten boards are characterized by different degrees of conservatism. The analysis in chapter 4 found that director election contestation also varied: just 1% of elections at the Richmond Fed in my sample were contested, for example, compared to about 40% in St. Louis. The regional distribution of Reserve Banks and boards offers an opportunity to investigate how differences in Reserve district population, economic conditions, and political environments may shape the exercise of bank influence on Fed governance. For instance, comparisons of Reserve districts could yield insight into the pools of director candidates that are unique to each district, and the sectoral interests that may be influential in Reserve Bank politics in some areas but not others. A more systematic consideration of how districts may vary—such as the composition of member banks, district size, and political context—could inform explanations for the regional variation I document in the dissertation, and form the basis of a theory of Reserve Bank politics more broadly.

Leveraging Other Sources of Data

Future research could also take advantage of existing data sources to contribute to a more detailed picture of Reserve Bank governance. One route would be to analyze the corpus of FOMC transcripts, which are released for every FOMC meeting with 5-year lag. While the transcripts are a popular data source for studies of FOMC policymaking, they could also be leveraged to gauge directors' influence—or lack thereof—on the policy positions or economic outlooks of Reserve Bank presidents. To take one example from the August 2008 FOMC meeting, the president of the Chicago Fed, Charles Evans, cited his board's concern about inflation—apparently so much concern that directors recommended an increase in the discount rate, despite Evans' advice they hold off on a rate change recommendation given the economy's precarious state—-as a reason he ultimately supported tightening policy.[4] The transcripts can thus provide insight into director influence and how their opinions are transmitted into the FOMC.

Another potential data source, though one less comprehensive than the FOMC transcripts, is directors' public statements. While most directors do not have prominent public positions—the New York Fed directors tend to be an exception—I did uncover several cases of directors writing op-eds in their local newspapers and making public speeches to local business and community organizations. In one instance, a former director wrote an op-ed expressing opposition to the removal of confederate statutes in their state, while another gave a speech to their local banking association decrying financial regulation. These records are more sparse, but if assembled they could be used to supplement or validate the political ideology scores introduced in Chapter 3. As I note in that chapter, one drawback to CFscores is that they cannot provide insight into directors' positions on particular issue areas, such as social vs. economic policy. Collecting directors' public statements could allow for a more nuanced description of policy preferences.

[4] See https://www.federalreserve.gov/monetarypolicy/files/FOMC20080805meeting.pdf, pg. 106.

Nonetheless, as highlighted throughout the dissertation, the data challenges in this domain are formidable. This is both a reality of the institution—the Reserve Banks are more opaque than most other policymaking institutions in the U.S. given their private status—but also perhaps deliberate. Influence in policymaking is difficult to observe and special interests have incentives to ensure that remains the case. The Reserve Banks may also be reluctant to release information that exposes more about the boards precisely because they are increasingly the target of criticism. While this may present obstacles to further study of the Reserve Banks, there are also reason to be optimistic. Over the last few decades, the Fed has undergone a cultural shift toward greater transparency, a trend that does not seem at risk of reversal anytime soon. The pressure from interest groups and Congress in the aftermath of the financial crisis also seems to have played a role in opening up the president and director appointment processes to greater public scrutiny. The Reserve Banks' willingness to be more transparent about their internal selection processes bodes well for future data collection efforts.

6.2.2 Substantive Areas of Focus

The existing literature's willingness to ignore Reserve Bank governance is often justified by an assumption that the boards of directors don't matter. This explanation is also offered as a defense of the current governance structure and as reassurance that directors are merely benign appendages to the System. But this assumption is largely based on disparate anecdotal accounts, rather than on any systematic data. An important path forward for a research agenda on Reserve Bank governance will be investigating the specific ways in which directors use their authority to exert influence on policy outcomes. In particular, future researchers should take a closer look at directors' discount rate recommendations, president appointments, and other statutory responsibilities that allow them to have direct or indirect impacts on policy.

Focusing on the role Reserve Banks play in supervising financial institutions would be an interesting extension of this project. While the Fed's regulatory responsibilities have grown significantly over the last few decades, they have not yet received much attention in the political science literature on the Fed. The Reserve Banks play an especially important role on this front through monitoring bank compliance on the ground—a responsibility delegated from the Board of Governors. Although Reserve Bank presidents do not have control over which regulatory policies are to be implemented, they presumably have some influence over enforcement intensity or efficacy. Moreover, Reserve Bank (Class A and Class B) directors also play a limited, but nonetheless relevant, role in ensuring their Banks' regulatory efficacy by determining supervisory staff compensation (in addition to, of course, selecting Reserve Bank presidents who have responsibility over regulatory activities). Future research could try to evaluate directors' indirect influence on regulatory outcomes by examining the relationship between directorate ideology and regulatory intensity, using the number of enforcement notices a Reserve Bank issues as a measure for intensity. Directors are expressly prohibited from weighing in on regulatory matters beyond personnel issues, but one interesting finding from the survey results presented in Chapter 5 is that several directors noted they had some influence on regulatory and supervisory activities. Private banks that appoint directors, moreover, likely care a great deal about regulatory policy—in some cases, perhaps even more than they care about monetary policy (Woolley 1984). Shining light on the Reserve Banks' regulatory role and how private banks might influence those activities via directors would be a major contribution, and would complement other research projects, like those proposed in Chapter 3, that would evaluate the explanatory power of directorate ideology for discount rate recommendations and president appointments.

Taking Reserve Bank governance seriously also offers an opportunity to think more concretely about the relationship between the banking and business sectors in American politics. Of the six directors that local banks elect directly, three are intended to be members of the local business community, thereby giving representation to the "borrowers" of credit that banks loan out. In effect, when electing Class B directors, banks are choosing members of their customer base to serve on the boards. While much has been written about the influence of business and finance on politics (e.g. Smith 2000; Hart 2004; Bonica 2013; Hertel-Fernandez 2018), there have been few attempts to consider where the interests and preferences of finance and industry might converge or diverge. As I show in chapters 3 and 4, Class A and Class B directors are for the most part indistinguishable. They have similar biographical characteristics and are politically conservative to a similar degree. This perhaps makes sense given that banks (or banking associations) elect both sets of directors. However, a more detailed analysis of which industrial sectors get representation on the boards, and which business executives banks choose to represent them, would go a long way to unpacking these results. Such an analysis could provide more insight into how banks view industry's compatibility with their own policy interests, as well as the kinds of networks in which industry and bank executives are embedded.[5]

Attention to other institutional features of Reserve Bank governance might also be a fruitful path forward. In addition to the boards of directors that oversee each Reserve Bank, most of the Reserve Banks have branch offices that are governed by their own boards of directors. These branch boards are composed of either five or seven members, with a majority of the directors appointed by the Reserve Bank and a minority appointed by the Board of Governors. Branch boards are cited somewhat frequently by Reserve Bank presidents in the FOMC transcripts, which suggests that they provide a similar information provision role as the headquarter board of directors and are able to channel their insights about the local economy into the FOMC. Examining these branches would provide an opportunity to extend theories about the director appointment process. In this case, rather than have banks elect directors, the Reserve Bank itself is an appointer. Anecdotally, we also know that these branch boards are breeding grounds for the headquarter boards. A closer look into the branches could thus provide a better sense of the pool of candidates from which directors are drawn. Beyond the branch boards, other governance institutions that allow banking interests to express their views to the Fed could be of interest of to researchers. For example, the Conference of Chairs, composed of the twelve Class C directors who chair their Reserve Bank boards of directors, meet regularly

[5] One could consider, for instance, the interlocks of industry and bank executives on private sector directorates outside the Reserve Banks. As noted in the survey in Chapter 5, most of the respondents were acquainted with sitting or former director prior to their own appointment. One venue where these connections may have been forged is the boards of directors of other companies.

with the Board of Governors. According to a respondent from my survey in Chapter 5, the Conference of Chairs featured discussion on policy and corporate governance issues that the respondent noted was not discussed regularly in board meetings. Focusing on these even more obscure elements of the Reserve Banks' system of governance could shed more light on the Fed's relationship with local economic and political elites, and the assortment of entry points through which banking interests can amplify their voice in the Federal Reserve System.

Bibliography

Aberbach, Joel, James Chesney, and Bert Rockman. 1975. "Exploring Political Attitudes: Some Methodological Lessons." *Political Methodology*. 2(1): 1-27.

Abramowitz, Alan I. 1991. "Incumbency, Campaign Spending, and the Decline of Competition in U.S. House Elections." *Journal of Politics*. 53(1): 34?56.

Adams, Renee B. 2017. "Good News for Some Banks." European Corporate Governance Institute Working Paper.

Adolph, Christopher. 2013. *Bankers, Bureaucrats, and Central Bank Politics: The Myth of Neutrality*. Cambridge, UK: Cambridge University Press.

Ainsley, Caitlin. 2017. "The Politics of Central Bank Appointments." *Journal of Politics*. 79 (4): 1205-1219.

Aizenman, Johua, Mahir Binici, and Michael M. Hutchinson. 2016. "The Transmission of Federal Reserve Tapering News to Emerging Financial Markets." *International Journal of Central Banking*. 12(2): 317-356.

Alesina, Alberto and Howard Rosenthal. 1995. *Partisan Politics, Divided Government, and the Economy*. Cambridge, UK: Cambridge University Press.

Alesina, Alberto and Lawrence Summers. 1993. "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence." *Journal of Money, Credit and Banking*. 25(2): 151-162.

Ansolabehere, Stephen and Alan Gerber. 1996. "The Effects of Filing Fees and Petition Requirements on U.S. House Elections." *Legislative Studies Quarterly*. 21(2): 249-264.

Anzia, Sarah F. 2014. *Timing and Turnout: How Off-Cycle Elections Favor Organized Groups*. Chicago: University of Chicago Press.

Anzia, Sarah F. 2015. "City Policies, City Interests: An Alternative Theory of Interest Group Systems." Goldman School of Public Policy Working Paper.

Anzia, Sarah F. and Terry M. Moe. Forthcoming. "Interest Groups on the Inside: The Governance of Public Pension Funds." *Perspectives on Politics*.

Barth, James, Gerard Caprio, and Ross Levine. 2012. *Guardians of Finance*. Cambridge, MA: MIT Press.

Bawn Kathleen, Marty Cohen, David Karol, Seth Masket, Hans Noel, and John Zaller. 2012. "A Theory of Political Parties: Groups, Policy Demands and Nominations in American Politics." *Perspectives on Politics*. 10(3): 571-97.

Bebchuk, Lucian A. 2007. "The Myth of the Shareholder Franchise." *Virginia Law Review*. 93: 675-732.

Beck, Nathaniel. 1984. "Domestic Sources of American Monetary Policy: 1955-1982." *Journal of Politics*. 46(3): 786-817.

Bibby, John F. and Thomas M. Holbrook 2004. "Parties and Elections." In *Politics in the American States* (eds. Virginia Gray and Russell Hanson). 8th ed. CQ Press.

Binder, Sarah and Mark Spindel. 2013. "Monetary Politics: Origins of the Federal Reserve." *Studies in American Political Development*. 27(1): 1-13.

Binder, Sarah and Mark Spindel. 2017. *The Myth of Independence: How Congress Governs the Federal Reserve*. Princeton, NJ: Princeton University Press.

Black, Lamont and Jennifer Dlugosz. August 2017. "Public Service or Private Benefits? Bankers in the Governance of the Federal Reserve System." SSRN Working Paper.

Blinder, Alan. 1998. *Central Banking in Theory and Practice*. Cambridge, MA: MIT Press.

Boehmke, Frederick J., Sean Gailmard, and John W. Patty. 2013. "Business as usual: interest group access and representation across policy-making venues." *Journal of Public Policy*. 33(1): 3-33.

Boesler, Matthew and Jenna Smialek. "How the New York Fed President Is Picked." *Bloomberg*. November 7, 2017. https://www.bloomberg.com/news/articles/2017-11-07/why-wall-street-isn-t-picking-its-next-overseer-quicktake-q-a.

Bonica, Adam. 2014. "Mapping the Ideological Marketplace." *American Journal of Political Science*. 58(2): 367-386.

Bonica, Adam. 2016. "Database on Ideology, Money in Politics, and Elections (DIME)." Harvard Dataverse, version 2.0. https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/O5PX0B.

Bonica, Adam. 2016. "Avenues of Influence: On the Political Expenditures of Corporations and Their Directors and Executives." *Business and Politics*. 18(4): 367-394.

Bonica, Adam, Jowei Chen, and Tim Johnson. 2015. "Senate Gate-Keeping, Presidential Staffing of "Inferior Offices," and the Ideological Composition of Appointments to the Public Bureaucracy." *Quarterly Journal of Political Science*. 10: 5-40.

Bonica, Adam, Adam Chilton, Jacob Goldin, Kyle Rozema, and Maya Sen. 2017. "The Political Ideology of Law Clerks." *American Law and Economics Review*. 19(1): 96-128.

Bonica, Adam, Adam Chilton, and Maya Sen. 2016. "The Political Ideologies of American Lawyers." *Journal of Legal Analysis*. 8(2): 277-335.

Bonica, Adam, Howard Rosenthal, and David J. Rothman. 2014. "The Political Polarization of Physicians in the United States: An Analysis of Campaign Contributions to Federal Elections, 1991 Through 2012." *JAMA Intern Med*. 178(8): 1308-1317.

Bonica, Adam and Maya Sen. 2017. "The Politics of Selecting the Bench from the Bar: The Legal Profession and Partisan Incentives to Politicize the Judiciary." *Journal of Law and Economics*. 60(4): 559-595.

Bonneau, Chris W. and Damon M. Cann. 2015. "Party Identification and Vote Choice in Partisan and Nonpartisan Elections." *Political Behavior*. 37(1): 43-66.

Bopp, Karl R. 1935. *The Agencies of Federal Reserve Policy*. Columbia, MO: University of Missouri Studies.

Bopp, Karl R. 1937. "Reserve Bank Directors." *Journal of Political Economy*. 45(4): 517-531.

Bordo, Michael D. 2016. "Some Historical Reflections on the Governance of the Federal Reserve." In *Central Bank Governance and Oversight Reform* (eds. John H. Cochrane and John B. Taylor). Stanford, CA: Hoover Institution.

Broockman, David. 2016. "Approaches to Studying Policy Representation." *Legislative Studies Quarterly*. 41(1): 181-215.

Broz, Lawrence. 2013. "Partisan Financial Cycles." In *Politics in the New Hard Times: The Great Recession in Comparative Perspective* (eds. Miles Kahler and David A. Lake). Ithaca, NY: Cornell University Press.

Cai, Jie, Jacqueline L. Garner, and Ralph A. Walkling. 2009. *Journal of Finance*. 64(5): 2389-2421.

Carpenter, Daniel. 2013. "Detecting and Measuring Capture." In *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*. (eds. Daniel Carpenter and David Moss). Cambridge, UK: Cambridge University Press.

Center for Popular Democracy. February 2018. "Working People Still Need a Voice at the Fed: 2018 Diversity Analysis of Federal Reserve Bank Directors."

Chandler, Lester V. 1958. *Benjamin Strong, Central Banker*. Washington D.C.: The Brookings Institution.

Chang, Kelly. 2003. *Appointing Central Bankers: The Politics of Monetary Policy in the United States and the European Monetary Union*. Cambridge, UK: Cambridge University Press.

Chappell Henry and Rob McGregor. 2000. "A Long History of FOMC Voting Behavior." *Southern Economic Journal.* 66:906-922.

Chappell, Henry, Thomas Havrilesky, and Rob McGregor. 1993. “Partisan Monetary Policies: Presidential Impact through the Power of Appointment.” *Quarterly Journal of Economics*. 185-218.

Chappell, Henry, Rob McGregor, and Todd Vermilyea. 2005. *Committee Decisions on Monetary Policy: Evidence from Historical Records of the Federal Open Market Committee.* Cambridge: MIT Press Books.

Clark, Lawrence. 1935. *Central Banking Under the Federal Reserve System*. New York: The Macmillan Company.

Clinton, Joshua, Anthony Bertelli, Christian Grose, David Lewis, and David Nixon. 2011. “Separated Powers in the United States: The Ideology of Agencies, Presidents, and Congress.” *American Journal of Political Science*. 56(2): 341-354.

Coglianese, Cary. 1996. “Litigating within Relationships: Disputes and Disturbance in the Regulatory Process.” *Law and Society Review*. 30(4): 735-766.

Cohen Marty, David Karol, Hans Noel, and John Zaller. 2008. *The Party Decides: Presidential Nominations Before and After Reform*. Chicago: University of Chicago Press.

Conti-Brown, Peter. 2014. “The Structure of Federal Reserve Independence.” Stanford University Rock Center for Corporate Governance: Working Paper Series No. 139.

Conti-Brown, Peter. 2016. *The Power and Independence of the Federal Reserve*. Princeton, NJ: Princeton University Press.

Corder, Kevin. 2012. *The Fed and the Credit Crisis*. Boulder, CO: Lynne Rienner Publishers.

Cutler, A. Claire, Virginia Haufler, and Tony Porter. 1999. “Introduction: Private Authority and International Affairs.” In *Private Authority and International Affairs*, eds. A. C. Cutler, V. Haufler, and T. Porter. Albany: State University of New York Press.

Dahl, Robert. 1961. *Who Governs? Democracy and Power in an American City*. New Haven, CT: Yale University Press.

Davidson, Chandler and Luis Ricardo Fraga. 1988. “Slating Groups as Parties in a ’Nonpartisan’ Setting.” *Western Political Quarterly*. 41(2): 373-390.

Dearie, John. 2015. “The U.S. Needs Two More Federal Reserve Banks.” *Wall Street Journal*. March 15. https://www.wsj.com/articles/john-dearie-the-u-s-needs-two-more-federal-reserve-banks-1426458210.

Drutman, Lee and Daniel J. Hopkins. 2013. “The Inside View” Using the Enron Email Archive to Understand Corporate Political Attention.” *Legislative Studies Quarterly*. 38(1):5-30.

Dunsmuir, Lindsay. “Federal Reserve under growing pressure to reform system, goals.” Reuters. August 22, 2016. http://www.reuters.com/article/us-usa-fed-reform-idUSKCN10X21T.

Eccles, Marriner S. 1951. *Beckoning Frontiers: Public and Personal Recollections*. New York, NY: Alfred A. Knopf.

Epstein, Gerald and Juliet Schor. 1990. "Corporate Profitability as a Determinant of Restrictive Monetary Policy: Estimates for the Post-War U.S.." In *The Political Economy of American Monetary Policy* (ed. Thomas Mayer). New York: Cambridge University Press.

Fessenden, Helen and Gary Richardson. 2016. "Whom Do the Federal Reserve Bank Boards Serve?" Federal Reserve Bank of Richmond Economic Brief.

Finer, David Andrew. 2018. "What Insights Do Taxi Rides Offer into Federal Reserve Leakage?" University of Chicago Booth School of Business, Stigler Center Working Paper No. 18.

Fisher III, Samuel H. and Rebekah Herrick. 2012. "Old versus New: The Comparative Efficiency of Mail and Internet Surveys of State Legislators." *State Politics and Policy Quarterly*. 13(2): 147-163.

Fouirnaies, Alexander, and Andrew B. Hall. 2018. "How Do Interest Groups Seek Access to Committees?" *American Journal of Political Science*. 62(1): 132-147.

Fox, Richard L. and Jennifer L. Lawless. 2005. "To Run or Not to Run for Office: Explaining Nascent Political Ambition." *American Journal of Political Science*. 49(3): 642-659.

Gilens, Martin and Benjamin Page. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens." *Perspectives on Politics.* 12(3): 564-581.

Government Accountability Office. 2011. "Federal Reserve Bank Governance: Opportunities Exist to Broaden Director Recruitment Efforts and Increase Transparency." GAO-12-18. https://www.gao.gov/products/GAO-12-18.

Geithner, Timothy. 2014. *Stress Test: Reflections on Financial Crises*. New York, NY: Crown Publishers.

Gourevitch, Peter A. 2003. "The Politics of Corporate Governance Regulation." *Yale Law Journal*. 112(7): 1829-1880.

Gray, Virginia. 2004. "The Socioeconomic and Political Context of States." In *Politics in the American States* (eds. Virginia Gray and Russell Hanson). 8th ed. CQ Press.

Greider, William. 1987. *Secrets of the Temple: How the Federal Reserve Runs the Country*. New York: Simon and Schuster.

Hacker, Jacob and Paul Pierson. 2002. "Business Power and Social Policy: Employers and the Formation of the American Welfare State." *Politics and Society*. 30(2): 277-325.

Hacker, Jacob and Paul Pierson. 2010. "Winner-Take-All Politics: Public Policy, Political Organization, and the Precipitous Rise of Top Incomes in the United States." *Politics & Society*. 38(2): 152-204.

Hacker, Jacob and Paul Pierson. 2014. "After the 'Master Theory': Downs, Schattschneider, and the Rebirth of Policy-Focused Analysis." *Perspectives on Politics*. 12(3): 643-62.

Haedtler, Jordan, Andrew Levin, and Valerie Wilson. 2016. "Making the Federal Reserve Fully Public: Why and How." https://populardemocracy.org/sites/default/files/A-Public-Fed-Why-and-How.pdf

Hajnal, Zoltan L., Paul G. Lewis, and Hugh Louch. 2002. "Municipal Elections in California: Turnout, Timing, and Competition." Public Policy Institute of California.

Hall, Richard L., and Alan V. Deardorff. 2006. "Lobbying as Legislative Subsidy." *American Political Science Review*. 100 (1): 69-84.

Hall, Richard L. and Frank W. Wayman. 1990. "Buying Time: Moneyed Interests and the Mobilization of Bias in Congressional Committees." *American Political Science Review*. 84(3): 797-820.

Harrison, W. B. 1977. "Regionalism: A Sample of Views Held by Federal Reserve District Directors." *Journal of Economics and Business*. 30:46-56.

Harrison, W. B. 1991. "Federal Reserve District Directors: Support System for a Public Institution." *Journal of Economics and Business*. 43:271-282.

Hart, David. 2004. "Business' Is Not An Interest Group: On the Study of Companies in American National Politics." *Annual Review of Political Science*. 7: 47-69.

Hastings, Delbert C. and Ross M. Robertson. 1962. "The Mysterious World of The Fed." *Business Horizons*. 5(Spring 1962).

Havrilesky, Thomas. 1995. *The Pressures on American Monetary Policy*. Norwell, Mass.: Kluwer Academic Publishers.

Havrilesky, Thomas and John Gildea. 1992. "Reliable and Unreliable Partisan Appointees to the Board of Governors." *Public Choice*. 73: 397-417.

Havrilesky, Thomas and John Gildea. 1995. "The Biases of Federal Reserve Bank Presidents." *Economic Inquiry*. 33: 274-284.

Hertel-Fernandez, Alexander. 2014. "Who Passes Business's "Model Bills"? Policy Capacity and Corporate Influence in US State Politics." *Perspectives on Politics*. 12(3): 582-602.

Hertel-Fernandez, Alexander. 2018. *Politics at Work: How Companies Turn Their Workers into Lobbyists*. Oxford: Oxford University Press.

Hibbs, Douglas. 1987. *The American Political Economy*. Cambridge, MA: Harvard University Press.

Hill, Seth J. and Gregory A. Huber. 2017. "Representativeness and Motivations of the Contemporary Donorate: Results from Merged Survey and Administrative Records." *Political Behavior*. 39(1): 33-29.

Hilsenrath, John. "Washington Strips New York Fed's Power." *Wall Street Journal*. March 4, 2015. https://www.wsj.com/articles/washington-strips-new-york-feds-power-1425526210

Hirst, Scott. 2018. "Universal Proxies." *Yale Journal on Regulation*. 35(2): Spring 2018.

Jeong, Gyung-Ho, Gary J. Miller, and Andrew Sobel. 2009. "Political Compromise and Bureaucratic Structure: The Political Origins of the Federal Reserve System." *Journal of Law, Economics, and Organization*. 25(2): 472-498.

Jinushi, Toshiki and Kenneth N. Kuttner. 2008. "The Information Content of Discount Rate Requests." Working Paper.

Kagan, Robert A. 1991. "Adversarial legalism and American government." *Journal of Policy Analysis & Management*. 10(3): 369-405.

Kalla, Joshua L. and David E. Broockman. 2016. "Campaign contributions facilitate access to congressional officials: A randomized field experiment." *American Journal of Political Science*. 60(3): 545-558.

Karlson, Kara. 2010. "Checks and Balances: Using the Freedom of Information Act to Evaluate the Federal Reserve Banks." American University Law Review. 60(1): Article 5.

Keller, Eric and Nathan J. Kelly. 2015. "Partisan Politics, Financial Deregulation, and the New Gilded Age." *Political Research Quarterly*. 68(3): 428-442.

Kelly, Kate and Jon Hilsenrath. "New York Fed Chairman's Ties to Goldman Sachs Raise Questions." *Wall Street Journal*, May 4, 2009. https://www.wsj.com/articles/SB124139546243981801.

Kerwin, Cornelius M. 2003. *Rulemaking: How Government Agencies Write Law and Make Policy*. Washington DC: Congressional Quarterly Press.

Krebs, Timothy B. 1998. "The Determinants of Candidates' Vote Share and the Advantages of Incumbency in City Council Elections." *American Journal of Political Science*. 42(3): 921-935.

Kwak, James. 2013. "Cultural Capture and the Financial Crisis." In *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*. (eds. Daniel Carpenter and David Moss). Cambridge, UK: Cambridge University Press.

Lopez-Moctezuma, Gabriel. 2018. "Sequential Deliberation in Collective Decision-Making: The Case of th FOMC." Working paper.

Lowi, Theodore J. 1969. *The End of Liberalism: The Second Republic of the United States*. New York, NY: Norton.

Malhotra, Neil and Stephen A Jessee. 2014. “Ideological Proximity and Support for the Supreme Court.” *Political Behavior*. 36(4): 817-846.

Malmendier, Ulrike, Stefan Nagel, and Zhen Yan. 2017. “The Making of Hawks and Doves: Inflation Experience on the FOMC.” NBER Working Paper no. 23228.

Mayer, Thomas. 1976. “Structure and Operations of the Federal Reserve System.” In *Compendium of Papers Prepared for the Financial Institutions and the Nation's Economy Study*, Book II, Committee on Banking, Currency and Housing, 94th Congress, 2nd Session. Washington DC: U.S. Government Printing Office.

McCord, Roisin, Edward Simpson Prescott, and Tim Sablik. 2015. “Explaining the Decline in the Number of Banks since the Great Recession.” Federal Reserve Bank of Richmond Economic Brief.

McCracken, Michael. 2010. “Disagreement at the FOMC: The Dissenting Votes Are Just Part of the Story.” *The Regional Economist*. Federal Reserve Bank of St. Louis. Oct. 2010.

McGregor, Rob Roy. 1996. “FOMC Voting Behavior and Electoral Cycles: Partisan Ideology and Partisan Loyalty.” *Economics & Politics*. 8(1): 17-32.

McCubbins, Mathew D., Roger G. Noll, and Barry R. Weingast. 1987. “Administrative Procedures as Instruments of Political Control.” *Journal of Law, Economics, and Organization*. 3(2): 243-277.

Meade, Ellen. 2007. “Disagreement, Regional Representation, and Federal Reserve Transcript Publication.” American University, Department of Economics Working Paper Series. Working Paper No. 2007-21.

Meade, Ellen and Nathan Sheets. 2005. “Regional Influences on FOMC Voting Patterns.” *Journal of Money, Credit and Banking*. 37(4): 661-677.

Melcher v. FOMC et al. 1986. 644 F.Supp. 510.

Melton, William. 1985. *Inside the Fed: Making Monetary Policy*. Homewood, IL: Dow Jones-Irwin.

Meltzer, Allan H. 2010. *A History of the Federal Reserve, Volume 2*. Chicago: University of Chicago Press.

Meltzer, Allan H. 2011. “Politics and the Fed.” *Journal of Monetary Economics*. 58(1): 1-82.

Meyer, Laurence. 2004. *A Term at the Fed: An Insider's View*. New York NY: Harper Collins.

Midler, Zachary. “What Kind of Man Spends Millions to Elect Ted Cruz?” *Bloomberg*. January 20, 2016. https://www.bloomberg.com/news/features/2016-01-20/what-kind-of-man-spends-millions-to-elect-ted-cruz-6.

Miller, Ervin. 1961. “Public Interest Representation on Federal Reserve Bank Directorates.” *The Review of Economics and Statistics*. 43(4): 380-384.

Moe, Terry. 1989. "The Politics of Bureaucratic Structure." In *Can the Government Govern?* (eds. John Chubb and Paul Peterson). Washington D.C.: Brookings.

Morris, Irwin. 2002. *Congress, the President, and the Federal Reserve: The Politics of American Monetary Policy-making*. Ann Arbor: University of Michigan Press.

Oliver, Eric, Shang E. Ha and Zachary Callen. 2012. *Local Elections and the Politics of Small-Scale Democracy*. Princeton, NJ: Princeton University Press.

Page, Benjamin I., Larry M. Bartels, and Jason Seawright. 2011. "Interviewing Wealthy Americans." Working Paper 1-1-07. Institute for Policy Research.

Page, Benjamin I., Larry M. Bartels, and Jason Seawright. 2013. "Democracy and the Policy Preferences of Wealthy Americans." *Perspectives on Politics*. 11(1): 51-73.

Peretz, Paul. 1983. *The Political Economy of Inflation in the United States*. Chicago, IL: University of Chicago Press.

Posen, Adam. 1995. "Declarations Are Not Enough: Financial Sector Sources of Central Bank Independence." In *NBER Macroeconomics Annual* (eds. Ben Bernanke and Julio Rotemberg). Volume 10.

Reagan, Michael D. 1961. "The Political Structure of the Federal Reserve System." *American Political Science Review*. 55(1): 64-76.

Reuss v. Balles et al. 1978. 574 F.2d 461.

Riegle v. FOMC et al. 1981. 656 F.2d 873.

Rogoff, Kenneth. 1985. "The Optimal Degree of Commitment to an Intermediate Target." *Quarterly Journal of Economics*. 100(1985): 1169-1190.

Rudder, Catherine E. 2008. "Private Governance as Public Policy: A Paradigmatic Shift." *Journal of Politics*. 70(4): 899-913.

Schattschneider, E.E. 1960. *The Semi-Sovereign People: A Realist's View of Democracy in America*. New York, NY: Holt, Reinhart, Winston.

Schnakenberg, Keith E., Ian R. Turner, and Alicia Uribe. 2017. "Allies of Commitment Devices? A Model of Appointments to the Federal Reserve." *Economics & Politics*. 29(2): 118-132.

Scheve, Kenneth. 2004. "Public Inflation Aversion and the Political Economy of Macroeconomic Policymaking." *International Organization*. 58(1): 2004.

Schlozman, Kay Lehman, Sidney Verba, and Henry E. Brady. 2012. *The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy*. Princeton, NJ: Princeton University Press.

Schonhardt-Bailey, Cheryl. 2013. *Deliberating American Monetary Policy: A Textual Analysis*. Cambridge, MA: MIT Press

Shiller, Robert. 1997. "Why do people dislike inflation?" In *Reducing Inflation: Motivation and Strategy* (eds. Christina and David Romer). Chicago, IL: University of Chicago Press.

Shull, Bernard. 1995. "Federal Reserve Independence: What Kind and How Much?" *Journal of Post Keynesian Economics*. 18(2): 211-230.

Shull, Bernard. 2005. *The Fourth Branch: The Federal Reserves Unlikely Rise to Power and Influence*. Santa Barbara, CA: Praeger.

Smith, Mark. 2000. *American Business and Political Power*. Chicago: University of Chicago Press.

Squire, Peverill and Eric R.A.N. Smith. 1988. "The Effect of Partisan Information on Voters in Nonpartisan Elections." *Journal of Politics*. 50(1): 169-179.

Stigler, George J. 1971. "The Theory of Economic Regulation." *The Bell Journal of Economics and Management*. 2(1): 3-21.

Suto, Isao. 2018. "Economic and Social Backgrounds of Top Executives of the Federal Reserve Before and After the Great Depression." In *Coping with Financial Crises. Studies in Economic History* (eds. Hugh Rockoff and Isao Suto). Springer.

Tausanovitch, Chris, and Christopher Warshaw. 2017. "Estimating Candidates' Political Orientation in a Polarized Congress." *Political Analysis*. 25(2): 1-21.

Thoma, Mark. "Federal Reserve Independence: The Never-Ending Story." *Milken Institute Review*. October 20, 2017.http://www.milkenreview.org/articles/federal-reserve-independence.

Todd, Walker. 1994. "The Federal Reserve Board before Marriner Eccles (1931-1934)." Federal Reserve Bank of Cleveland Working Paper no. 94-05.

Tootell, Geoffrey M. B. 2000. "Reserve Banks, the Discount Rate Recommendation, and FOMC Policy." *Southern Economic Journal*. 66(4): 957-975.

Trounstine, Jessica. 2011. "Evidence of a Local Incumbency Advantage." *Legislative Studies Quarterly*. 36(2): 255-280.

Trounstine, Jessica. 2013. "Turnout and Incumbency in Local Elections" *Urban Affairs Review*. 49(2): 167-189.

Useem, Michael. 1995. "Reaching Corporate Executives." In *Studying Elites Using Qualitative Methods* (eds. Rosanna Hertz and Jonathan B. Imber). Thousand Oaks, CA: SAGE Books.

U.S. Congress. 1952. "Monetary Policy and the Management of Public Debt." Report of the Subcommittee on the General Credit and Debt Management of the Joint Committee on the Economic Report. 82nd Congress, 2nd Session.

U.S. House of Representatives. 1964. "The Federal Reserve System After Fifty Years." Report of the Subcommittee on Domestic Finance of the Committee on Banking and Currency. 88th Congress, 2nd Session.

U.S. House of Representatives. 1976. "Federal Reserve Directors: A Study of Corporate and Banking Influence." Staff Report for the Committee on Banking, Currency and Housing. 94th Congress.

Visser, Bauke and Otto H. Swank. 2007. "On Committees of Experts." *Quarterly Journal of Economics*. 122(1): 337-372.

Warren, Elizabeth. April 3, 2018. "Warren Statement on Appointment of John Williams as President of the New York Fed."

Weise, Charles. 2008. "Private Sector Influences on Monetary Policy in the United States." *Journal of Money, Credit, and Banking*. 40(2-3): 449-462.

Welch, Catherine, Rebecca Marschan-Piekkari, Heli Penttinen, and Marja Tahvanainen. 2002. "Corporate Elites as Informants in Qualitative International Business Research." *International Business Review*. 11(2002): 611-628.

Woolley, John. 1984. *Monetary Politics: The Federal Reserve and the Politics of Monetary Policy*. Cambridge, UK: Cambridge University Press.

Woolley, John. 1994. "The Politics of Monetary Policy: A Critical Review." *Journal of Public Policy*. 14(1): 57-85.

Yackee, Jason Webb and Susan Webb Yackee. 2006. "A Bias towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy." *Journal of Politics*. 68 (1): 128-39.